

1. DESCRIPTION

These external speaker-microphones contain a handheld speaker, microphone, and push-to-talk switch. A cable, terminated with a special plug, is provided for attaching to the accessory connector on the side of the MT500 universal series "Handie-Talkie" FM portable radios.

When the external speaker-microphone is attached to the radio, the internal speaker in the radio is disabled, and receiver audio output is connected to the external speaker. Similarly, the external microphone is connected to the transmitter and the external push-to-talk switch will energize the PTT relay in the radio.

With the external speaker-microphone attached to the radio, the internal microphone and push-to-talk switch are still operational, but you must always listen at the external speaker.

A spring clip on the back of the external speaker-microphone can be rotated for convenience when securing it to clothing.

2. OPERATION

- Place the lip of the external speaker-microphone plug (P1) in the slot on top of the radio (above the accessory connector) and pivot the plug into the accessory connector on the radio.
- Tighten the threaded stud on the plug into the threaded hole on the radio.
- While listening to the external speaker, turn the radio on and operate as explained in the operating manual supplied with the radio.

NOTE

NMN6089A is used with the NLN4477A Adapter Cable.

3. MAINTENANCE

Refer to the schematic diagram, the exploded view, and the parts lists. Every part in the speaker-microphone is identified and illustrated for assistance in removal and replacement.

For MT500 Universal Series FM Radios

MODEL NMN6081A, STRAIGHT CORD

MODEL NMN6082A, COILED CORD

MODEL NMN6089A, COILED CORD "QUICK DISCONNECT"

Speaker-Microphone Kits:

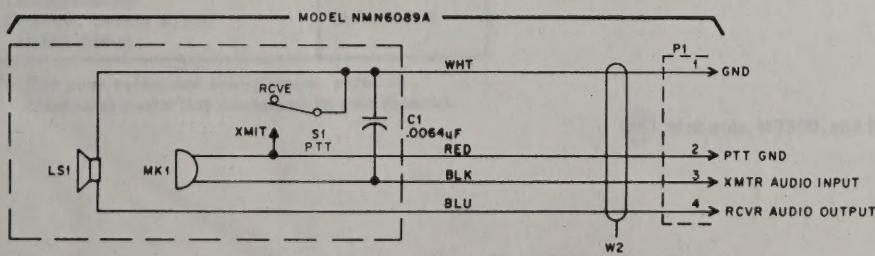
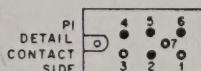
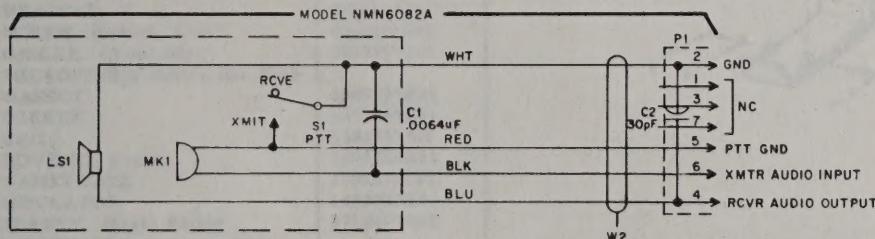
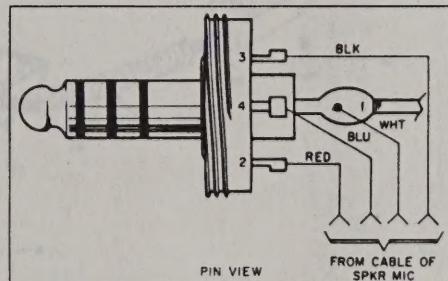
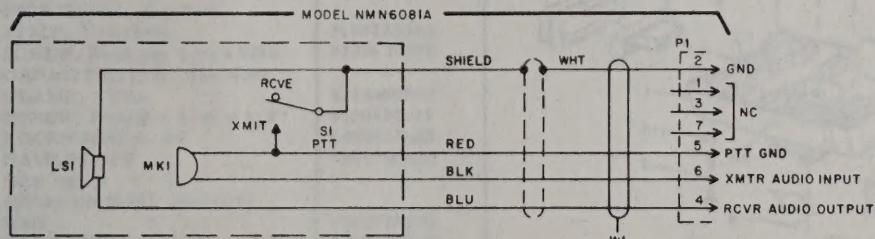
NMN6081A, Straight Cord

NMN6082A, Coiled Cord

NMN6089A, Coiled Cord "Quick Disconnect"

PLF-1238-C

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
C1	2184008H05	CAPACITOR, Fixed: .0064 uF $\pm 10\%$; 50 V (NMN6082A only)
C2	2182358G95	30 pF $\pm 10\%$; 75 V; N750
LS1	5005334D01	SPEAKER, Dynamic: 39 Ω , 2-inch diameter
MK1	5982575J02	MICROPHONE: Miniature; Res: 700 Ω , Imped: 5000 $\Omega \pm 30\%$
P1	2805646F02 or 2805780G02	PLUG: Connector, 7-contact (NMN6081A, NMN6082A) Connector (NMN6089A)
S1	4082159D01	SWITCH: Micro; PTT, SPDT
W1	3084048H02	CORD: Straight, 48"
W2	3084123H02	Coiled



MODELS	SUFFIX
NMN6081A	I
NMN6082A	I
NMN6089A	-

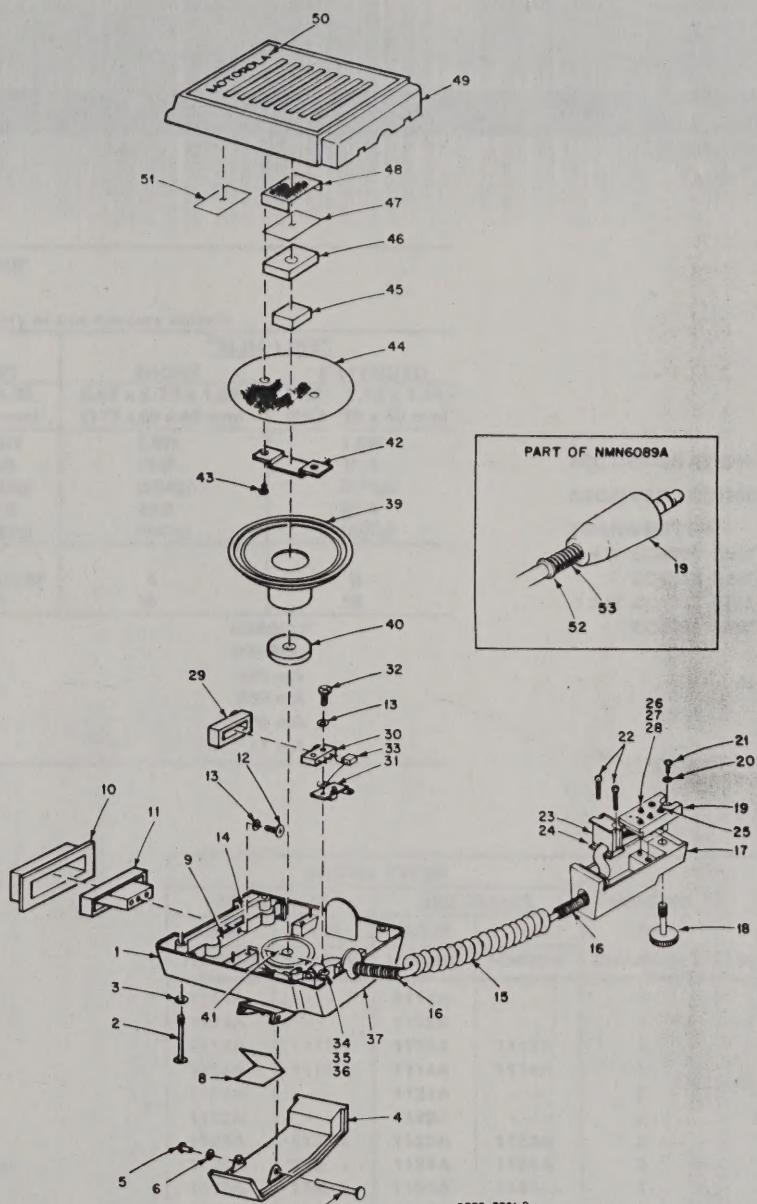


PARTS LOCATION AND IDENTIFICATION

Speaker-Microphone Exploded View
 NMN6081A Straight Cord
 NMN6082A Coiled Cord

PLF-1239-C

ITEM NO.	NOMENCLATURE	MOTOROLA PART NO.
1	HOUSING, Back	0105958B64
2	SCREW, Captive	0382210E03
3	WASHER, Insulator	0482418B09
4	CLIP, Pocket	4284416H05
5	SCREW, Tapping	0300115043
6	WASHER, Flat	0400001793
7	PIN, Clip	2282395B29
8	SPRING, Clip	4105942A01
9	SPRING, Actuator	4184491H01
10	BOOT	3205720B01
11	PUSHBUTTON	3805718B01
12	SCREW, Tapping; 2-56 x 5/16"	0300136914
13	LOCKWASHER, #2	0400008406
14	INSERT, Microphone	4305721B01
15	CORD (W1) or (W2), See Note	-
16	SPRING, Strain Relief (NMN6081A, NMN6082A)	4105466B02
17	HOUSING, Connector (NMN6081A, NMN6082A)	1505710D01
18	SCREW, Thumb (NMN6081A, NMN6082A)	0305822D03
19	PLUG, Connector; (P1) See Note	-
20	LOCKWASHER	0400115361
21	SCREW, Phillips; 2-56 x 1/4"	0300132342
22	SCREW, Phillips; 2-56 x 3/8" (NMN6081A, NMN6082A)	0300139750
23	STRAP, Cable (NMN6081A, NMN6082A)	4205591E01
24	CLAMP, Cable (NMN6081A, NMN6082A)	4205590E01
25	CONTACT, Stud	3905533E01
26	PIN, Contact (NMN6081A, NMN6082A)	3905767D01
27	SPRING, Contact (NMN6081A, NMN6082A)	4105768D01
28	RING, Retaining	4205463E01
29	BOOT	3205719B01
30	SWITCH (S1), See Note	-
31	STRIP, Terminal	3100125063
32	SCREW, Phillips; 2-56 x 5/16"	0300129074
33	CAPACITOR (C1), See Note	-
34	CLAMP, Cable	4284409H01
35	SCREW, Phillips; 4-40 x 1/4"	0300120621
36	LOCKWASHER, #4	0400007683
37	NAMEPLATE	3305150B19
38	NOT USED	-
39	SPEAKER (LS1), See Note	-
40	PAD	7505771B01
41	INSULATOR	1405922A01
42	BRACKET	0782158J01
43	SCREW, Slotted, 5/32"	0300139205
44	GRILLE, Cloth; felt	3505715B01
45	MICROPHONE (MK1), See Note	-
46	GASKET	3205735B01
47	SCREEN	3505450B01
48	GRILL	1382159J01
49	HOUSING, Front	1505722B03
50	NAMEPLATE	3305159D01
51	INSULATOR	1482392E05
52	SLEEVE, Strain Relief (NMN6089A)	3784379H01
53	SPRING, Strain Relief (NMN6089A)	4105275B01



DEPF-7721-D

NOTE: For part value and description, refer to
 electrical parts list contained in this manual.

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**MOTOROLA****MT500 SERIES****"Handie-Talkie" FM Two-Way Radios**

403-512 MHz

SPECIFICATIONS**GENERAL**

Model Series:	H24BBU', H24BBB', H34BBU', H34BBB'					
Frequency:	403-512 MHz					
Power Supply:	One rechargeable nickel-cadmium battery or one mercury battery					
Dimensions: less antenna & knobs (H x W x D in inches):		"OMNI"		"SLIM-LINE"		
		SHORT	EXTENDED	SHORT	EXTENDED	
		6.97 x 2.73 x 1.85 (177 x 69 x 47 mm)	7.62 x 2.73 x 1.85 (193 x 69 x 47 mm)	6.97 x 2.73 x 1.59 (177 x 69 x 40 mm)	7.62 x 2.73 x 1.59 (193 x 69 x 40 mm)	
Weight (ounces)	4W	1.5W	4W	1.5W	1.5W	
Nickel-Cadmium Battery:	25.3 (717g)	24.9 (706g)	25.9 (734g)	25.5 (723g)	19.9 (564g)	20.4 (578g)
Mercury Battery:	26.8 (760g)	26.4 (748g)	27.4 (777g)	27.0 (766g)	20.9 (593g)	21.4 (607g)
Battery Life (hours)						
Nickel-Cadmium Battery:	8	14 or 9*	8	14 or 9*	8	8
Mercury Battery:	25	30*	25	30*	18	18
Current Drain: (Using 15 Vdc Supply)						
Transmit 1.5 W:			H24BBB' H34BBB'		H24BBU' H34BBU'	
4.0 W:			405 mA		425 mA	
970 mA					990 mA	
**Receive:			70 mA		70 mA	
**Standby:			11 mA		11 mA	

* 10 - 10 - 80 duty cycle — all others have a 5 - 5 - 90 duty cycle.

** Add 3 mA for Tone PL and 4 mA for Digital PL.

RECEIVER

Frequency Stability — (-30° C to +60° C; +25° C Ref):	± .0005%
Channel Spacing:	25 kHz
Sensitivity —	
20 dB Quieting:	0.50 uV
12 dB SINAD:	0.35 uV
Squelch PL:	0.25 uV
Modulation Acceptance:	7.5 kHz
Intermodulation (EIA SINAD):	70 dB
Spurious/...age Rejection:	70/60 dB
Selectivity (EIA SINAD):	70 dB
	75 dB (optional)
Frequency Separation —	
No Degradation:	1 MHz
3 dB Sensitivity Degradation:	2 MHz
Audio Output — (At less than 5% distortion):	500 mW

TRANSMITTER

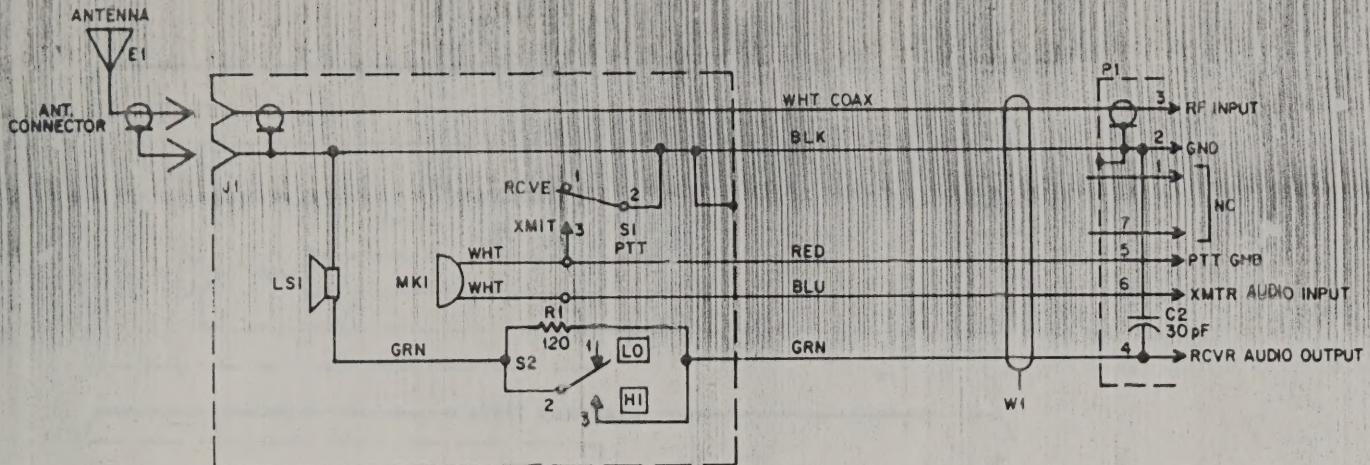
RF Power Output —	H24BBB'	H34BBB'
	H24BBU'	H34BBU'
15 Vdc Nickel-Cadmium Battery:	1.5 W	4.0 W
12.7 Vdc Mercury Battery		
NLN6762, NLN6936:	1.0 W	2.0 W
12.0 Vdc Mercury Battery		
NLN6683:	0.7 W	—
Modulation:	16F3	
Frequency Stability — (-30° C to +60° C; +25° C Ref):	± .0005%	
FM Noise:	55 dB	
Audio Distortion (At 1000 Hz, 3 dB deviation):	3%	
Frequency Spacing — (No Degradation):	6 MHz	

MODEL TYPES				NUMBER OF CHANNELS	TYPE OF SQUELCH		
BBB SERIES		BBU SERIES					
1.5 W	4 W	1.5 W	4 W				
H24BBB'	H34BBB'	H24BBU'	H34BBU'	1			
1111A	---	1111A	---	1			
1112A	---	1112A	---	1			
1113A	1113A	1113A	1113A	1			
1114A	1114A	1114A	1114A	1			
1121A	---	1121A	---	2			
1122A	---	1122A	---	2			
1123A	1123A	1123A	1123A	2			
1124A	1124A	1124A	1124A	2			
1143A	1143A	1143A	1143A	4			
1144A	1144A	1144A	1144A	4			
1164A	1164A	1164A	1164A	6			
1184A	1184A	1184A	1184A	8			
3112A	---	3112A	---	1			
3113A	3113A	3113A	3113A	1			
3114A	3114A	3114A	3114A	1			
3122A	---	3122A	---	2			
3123A	3123A	3123A	3123A	2			
3124A	3124A	3124A	3124A	2			
3143A	3143A	3143A	3143A	4			
3144A	3144A	3144A	3144A	4			
3154A	3154A	3154A	3154A	5			
3164A	3164A	3164A	3164A	6			
3184A	3184A	3184A	3184A	8			

Related Publications Available Separately:
 Operating Instructions 68P81012C50
 Theory/Maintenance Manual 68P81012C55
 Digital PL (Model A) Supplement 68P81018C45
 Digital PL (Model B) Supplement 68P81018C40

Service Manual

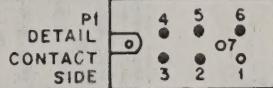
68P81012C58-B



NOTE:

INSIDE OF SPEAKER-MICROPHONE HOUSING IS ELECTRICALLY CONDUCTIVE.
COAXIAL SHIELD OF CABLE IS ELECTRICALLY GROUNDED TO SHROUD.

MODELS	SUFFIX
NMN6083A	1

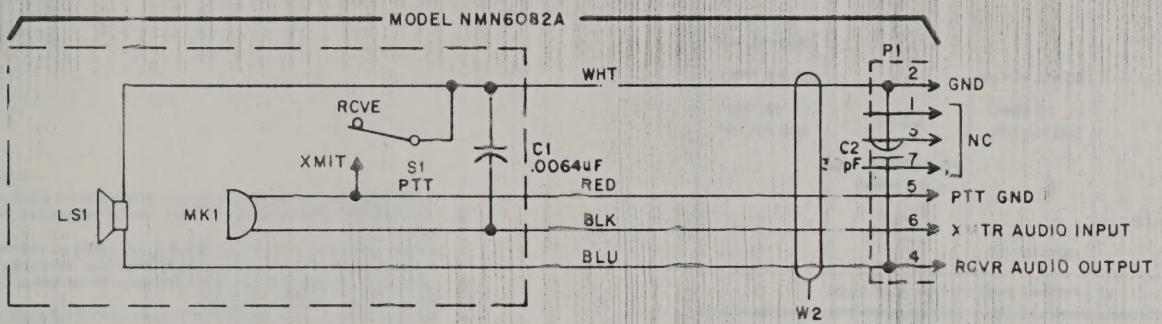
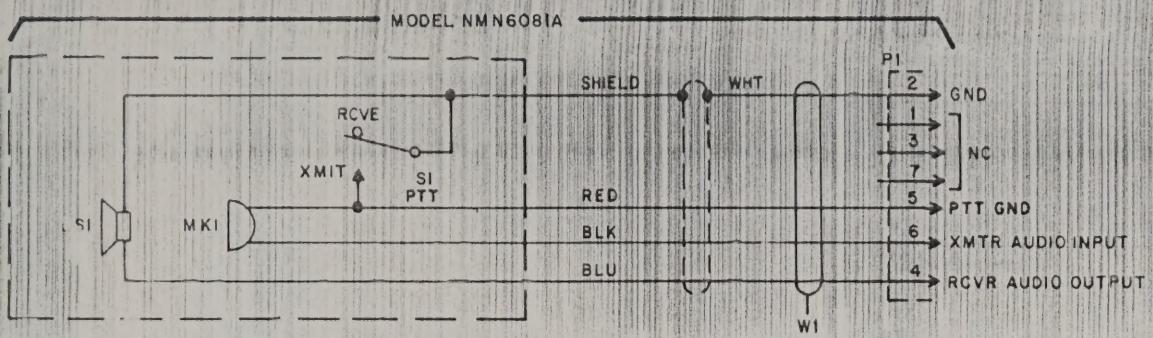


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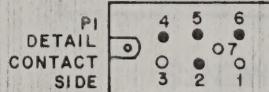
NMN6083A External Speaker-Microphone-Antenna PLF-1251-B

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
E1*	NAE6132A NAE6133A	ANTENNA: ANTENNA, Helical; 440-470 MHz ANTENNA, Helical; 470-512 MHz
C2	2182358G95	CAPACITOR: 30 pF ±10%; 75 V; N 50
J1	0905261B01	JACK: Connector, RF
LS1	5083466D02	SPEAKER, Dynamic; 2", 300-3500 Hz, res: 39 Ω ±10%
MK1	5082162D01	MICROPHONE: Cartridge; res: 585Ω, imped: 1650 Ω @ 1 kHz
P1	2805646F02	PLUG: Connector, 7-contact
R1	0600125A27	RESISTOR, Fixed: 120 Ω ±5%; 1/2 W
S1	4084289H01	SWITCH: PTT, SPDT
S2	4082085J03	Toggle, SPDT
W1	3005652F01	CABLE: Multi-Conductor

* Not part of PSR Speaker-Microphone Kit, order separately.



MODELS	SUFFIX
NMN6081A	1
NMN6082A	1

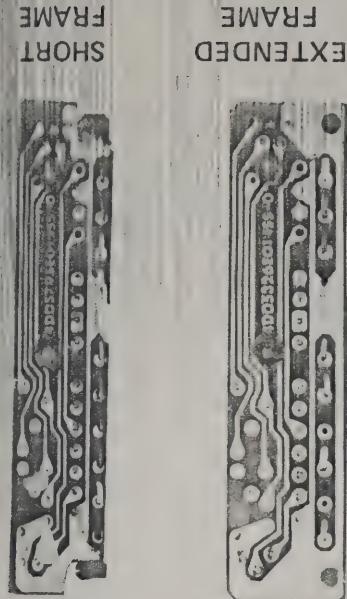


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Speaker-Microphone Kits:
NMN6081A Straight Cord
NMN6082A Coiled Cord

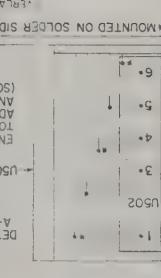
PLF-1238-B

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
C1	2184008H05	<u>CAPACITOR, Fixed:</u> .0064 μF ±10%; 50 V (NMN6082A only)
C2	2182358G95	30 pF ±10%; 75 V; N750
LS1	5005334D01	<u>SPEAKER, Dynamic:</u> 39 Ω, 2-inch diameter
MK1	5982575J02	<u>MICROPHONE:</u> Minature; Res: 700 Ω, Imped: 5000 Ω ±30%
P1	2805646F02	<u>PLUG:</u> Connector, 7-contact
S1	4082159D02	<u>SWITCH:</u> Micro; PTT, SPDT
W1	3084048H02	<u>CORD:</u> Straight, 48"
W2	3084123H02	Coiled



NONREFERENCED ITEMS	
0105950D70	Assembly, Adapter; contains circuit board & bracket (NLN4645A)
0105959C02	Assembly, Adapter; contains circuit board & bracket (NLN4645A)
09093796E01	SOCKET, Spring Board (NLN464A, NLN4645A)
42057946E01	CIRCUIT, Module mounting (NLN464A, NLN4645A)
8405335E01	CIRCUIT, Module mounting (NLN464A, NLN4645A)
09093604E06	SOCKET, Spring Board (NLN464A)
0905287C05	SOCKET, Spring Board (NLN464A)
0105959C02	Assembly, Adapter; contains circuit board & bracket (NLN4645A)
0105950D70	Assembly, Adapter; contains circuit board & bracket (NLN4645A)

NOTE: FINE OPTIMUM PERFORMANCE, ORDER PART NUMBER ONLY.



NLN4696A "BBU" Series Extended Frame (Low Band) PLF-1243-B

NLN4687A "BBB" Series Extended Frame (PA+RT)

NLN4688A "BBB" Series Extended Frame (PA+RT)

NLN4645A "BBU" Series Short Frame

NLN4646A "BBB" Series Short Frame

NLN4645A "BBU" Series Extended Frame

NLN4646A "BBB" Series Extended Frame (PA+RT)

NLN4645A "BBU" Series Extended Frame (PA+RT)

NLN4646A "BBB" Series Extended Frame (PA+RT)

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NLN4645A "BBU" Series Extended Frame (PA+RT)

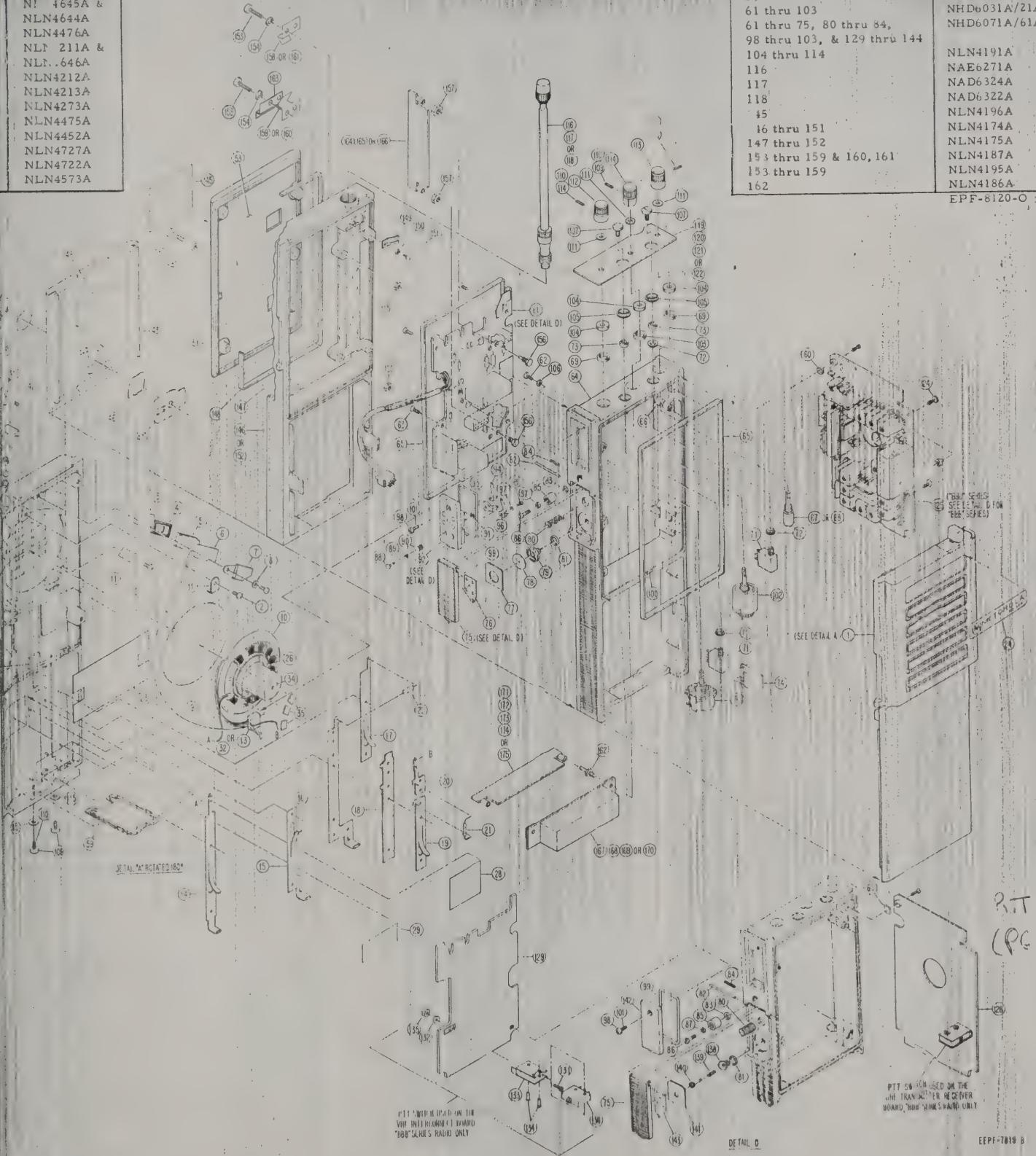
NLN4646A "BBB" Series Extended Frame (PA+RT)

NLN4645A, NLN4646A

NLN4211A, NLN4644A

NLN4645A, NLN4646A

MOTOROLA
PART NO.
4605800E01
04205529F01
NLN4215A
NLN4645A &
NLN4644A
NLN4476A
NLN 211A &
NLN .646A
NLN4212A
NLN4213A
NLN4273A
NLN4475A
NLN4452A
NLN4727A
NLN4722A
NLN4573A



ITEM(S)	P/O KIT NO.
1 thru 29, & 36 thru 42	NLN4184A
1 thru 31	NLN4208A
43 thru 48	NLN4180A
51 thru 55	NLN4179A
59	NLN4182A
61 thru 103	NHD6031A/21A
61 thru 75, 80 thru 84,	NHD6071A/61A
98 thru 103, & 129 thru 144	
104 thru 114	NLN4191A
116	NAE6271A
117	NAD6324A
118	NAD6322A
45	NLN4196A
46 thru 151	NLN4174A
147 thru 152	NLN4175A
153 thru 159 & 160, 161	NLN4187A
153 thru 159	NLN4195A
162	NLN4186A

EPF-8120-O

PARTS LIST

Exploded View Parts List

PLF-1306-B

ITEM NO.	NOMENCLATURE	MOTOROLA PART NO.
1	COVER, Front, Extended	1505660D01
2	SCREW, Mach(2-56x1/8 Phl-Pan)	0300138651
3	PAD, Mic	3805450B01
4	GASKET, Mic	7505577F01
5	CARTRIDGE, Mic	5932575J02
6	PAD, Gasket	7582745J01
7	BRACKET, Mic	0705672D01
8	WASHER, Spring	0405314E01
9	CLOTH, Felt Grill	3505370C01
10	SPEAKER	5005334D01
11	CLAMP, Speaker	4205670D01
12	CLAMP, Speaker	4205671D01
13	RECEPT, Conn Assy CS	0105956C87
14	STRAP, Contact, Neg	4205573A01
15	STRAP, Contact, Sen	4205575A01
16	STRAP, Contact, Charge	4205283E01
17	STRAP, Contact	4205576A01
18	INSULATOR, Contact	1405282E01
19	STRAP, Contact, Pos	4205269G01
20	STRAP, Contact, Pos	4205270G01
21	FUSE	6505214E01
22	RECTIFIER, Silicon	4882466H13
23	INSULATOR, Paper	1405547G02
24	NAMEPLATE	3305537E01
25	Not Used	
26	INSULATOR, Speaker	1405311G01
27	ADHE, Silicone Rubber	1110019A88
28	LABEL, Patent	1305436E01
29	LABEL, FCC	54865436
30	GASKET, Plug	3205315E01
31	PLUG, Cover	3805115E01
32	RECEPT, Conn Assy PL	0105958C87
33	INSULATOR, Speaker	1405311G01
34	TAPE, Insulator	1110003E58
35	INSULATOR, Paper	1482392E05
36	SWITCH, Toggle, SPDT	4005061E01
37	GASKET, "O" Ring	3205082E01
38	WASHER, Special	0405081E01
39	NUT, Mtg	0205050E03
40	ESCUTCHEON, Switch	1305057E01
41	KNOB, Switch	3605114E01
42	SCREW, Set	0383174C04
43	COVER, Battery	1505697D01
44	BUTTON	3805908D01
45	WASHER	0405910D01
46	WASHER, Spring	0405316E01
47	LATCH	5505907D01
48	PAD	7505083E01
49	Not Used	
50	Not Used	
51	COVER, Rear	1505943D01
52	Not Used	
53	PAD, Cover	7505533F01
54	WASHER, Se 1	0484345A06
55	SCREW, Cap.ve	0305662D11
56	Not Used	
57	Not Used	
58	Not Used	
59	LATCH Assy	NLN4182A
60	"O" Ring	3205082E06
61	INTERCONNECT Bd Assy	
62	SCP (ach#2-56x3/16Phl Pan)	0300138661
63	SCR, Mach#2-56x1/4 Slot Flt Hd)	0300138661
64	FRAME, Long	705640D03
65	GASK T, Frame	3205520G01
66	BUSH G, Cover Mtg	4305661D01
67	POT, Ceramic	1805055E01
68	POT, Ceramic Alternate	1805333E01
69	NUT, Special	0282653D03
70	POTENTIOMETER, Control Sw.	1805370E01
71	JACK, Micro	0905657G01
72	BUSHING, Shoulder	4305052E02
73	NUT, Special	0205050E01
74	SHIELD, Antenna	2605054E01
75	LEVER	4505784D01
76	SPRING, Actuator (PTT)	4105783D03
77	GASKET (PTT)	3205378G01
78	CONTACT, Disc (PTT)	3905196G01
79	CONTACT, Feed-Thru (PTT)	3905195G01
80	SPRING, Compression (PTT)	4105267E01
81	SEAL "O" Ring	3205082E02
82	PIN, Spring	2205084E01
83	WASHER, Insert	0405249F01
84	SCREW, Set	0305246E01
85	INSERT, Threaded	4305781D01
86	STUD	4605154E01
87	WASHER, Stud	0405248E01

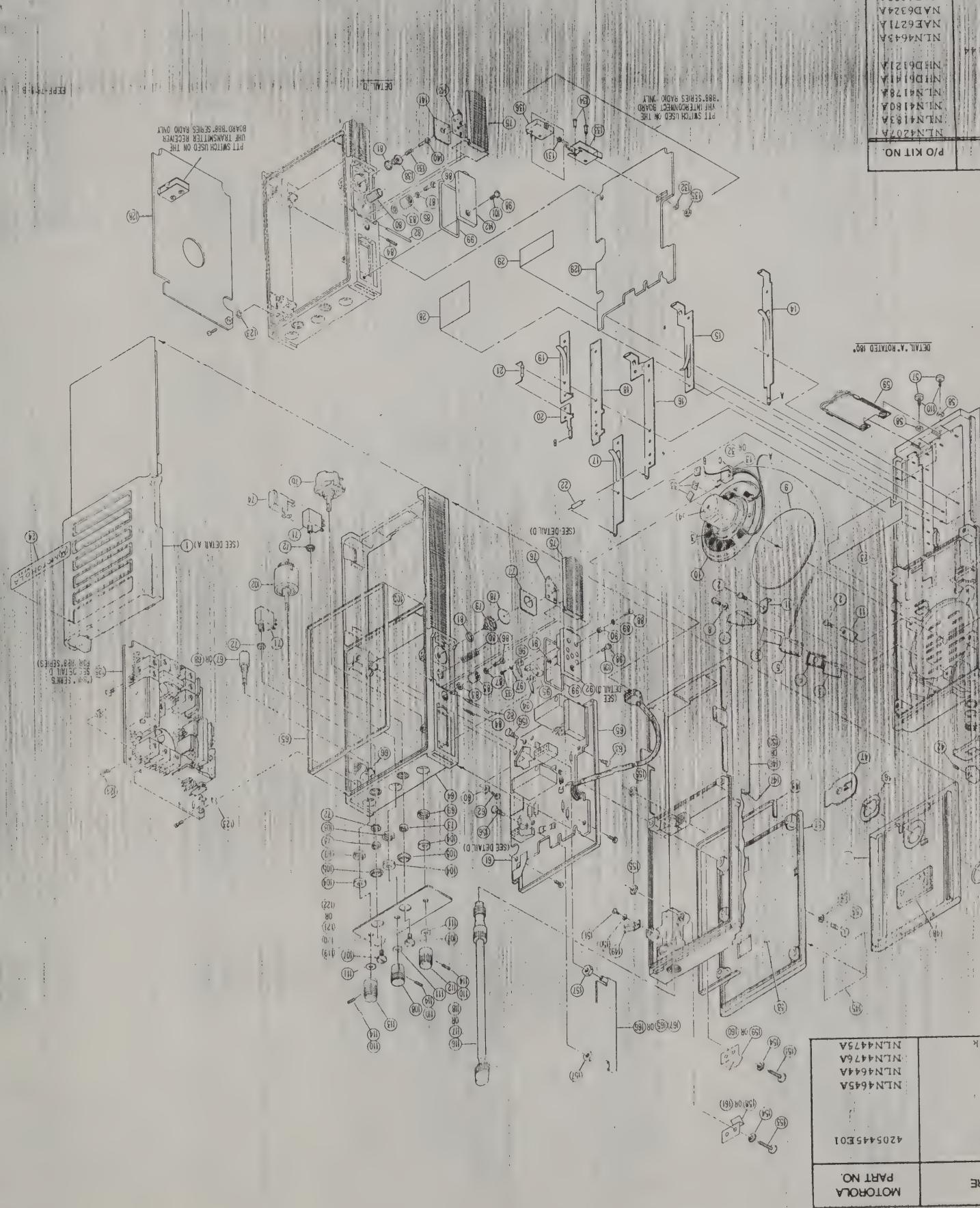
ITEM NO.	NOMENCLATURE	MOTOROLA PART NO.	ITEM NO.	NOMENCLATURE
88	PIN, Contact	3905456F01	162	SCREW, Guide
89	GASKET, "O" Ring	3205082E03	163	CLIP, Option Bd.
90	SPRING, Compression	4105424F01	164	C7R7 Deck
91	RING, Retaining	4205463E02	165	TONE PL. D.
92	RECEPTACLE	0905677D01	166	DPL & TPL Deck
93	SCR, Mach#0-80x1/8 Flt Hd)	0300134684	167	OPTION Deck (Tone PL)
94	CONTACT	4105197G03	168	OPTION Deck (Digital PL)
95	BLOCK	4205072E01	169	OPTION Deck (Selective Call)
96	CONTACT	4105197G01	170	OPTION Deck (Single-Tone)
97	WASHER	0400134190	171	TIME Out Timer
98	SCREW, Mach#2-56 x 3/16 SST)	0300138661	172	SEL Call (4 Tone)
99	SEAL "O" Ring	3205661G01	173	SEL Call (Long Tone)
100	ADHESIVE, RTVSilicone Rubber	1110019A88	174	MULTI Single-Tone
101	SEALANT, Compound	1110019A63	175	C8R8 Deck
102	SWITCH, Rotary, 4 freq	4005119E01		
	or SWITCH, Rotary, 5 freq	4005119E02		
	or SWITCH, Rotary, 6 freq	4005053E03		
	or SWITCH, Rotary, 8 freq	4005053E01		
103	NUT Special	0282653D05		
104	WASHER, Rubber	7583562H02		
105	BUSHING, Insulator	4305051E01		
106	WASHER, Insulated	0400474215		
107	SCREW, Jack	0310129A24		
108	KNOB, Control	3605927D05		
109	SCREW, Latch			
110	GLYPTOL	1100008675		
111	WASHER, Nylon	040E735F01		
112	KNOB, Vol	3605927D01		
113	KNOB, Squelch	3605927D03		
114	SCREW, Set	0383174C02		
115	WASHER, Latch	0400120581		
116	ANTENNA, Telescopic(2 Section)	8505550E		
117	ANTENNA, Telescopic(5 Section)	8505549E		
118	ANTENNA, Telescopic(6 Section)	8505762A01		
119	ESCUTCHEON, 4 freq	1305621D09		
120	ESCUTCHEON, 5 freq	1305621D05		
121	ESCUTCHEON, 6 freq	1305621D15		
122	ESCUTCHEON, 8 freq	1305621D07		
123	Not Used			
124	SCREW, Captive	0305864D01		
125	TRANSCIEVER Bd. Assy ("BBU" Series)	NUE6231A		
126	Not Used	NUE6232A		
127	Not Used	NUE6233A		
128	TRANSCIEVER Bd. Assy ("BBB" Series)	NUE6242A		
		NUE6243A		
		NUE6292A		
		NUE6293A		
129	INTERCONNECT Bd. Assy			
130	Not Used			
131	SCREW, Special	0305525G01		
132	WASHER	0400140015		
133	BRACKET, Switch	0705261E01		
134	EYELET	0505095E09		
135	NUT	0200400B65		
136	SWITCH, Micro	4005265E01		
137	Not Used			
138	NUT, PTT	0205250E01		
139	SPRING, PTT	4105252E01		
140	ACTUATOR, PTT	4705251E01		
141	GASKET, Switch	3205077E01		
142	COVER, Receptacle	1505212E		
143	SPRING, Actuator	4106783D		
144	Not Used			
145	PLATE, Information	6405538E01		
146	HOUSING, Sleeve, Extended	1505858D02		
147	ADHESIVE, RTVSilicone Rubber	1110019A84		
148	GASKET, Frame	3205520G01		
149	CLIP, Antenna	4205860D01		
150	WASHER, Spring	0405314E03		
151	SCREW, Special	0305044E01		
152	HOUSING, Sleeve	1505858D01		
153	MACH. Screw(2-56x3/8 Slot Bind)	0300136745		
154	LK Wash (#2 Split)	0300400136		
155	NUT (#4 Hex)	0200115676		
156	POST, Guide	4605798E01		
157	NUT	0205797E01		
158	CLIP, Option Bd.	4205445E04		
159	CLIP, Option Bd.	4205445E03		
160	CLIP, Option Bd.	4205445E02		
161	CLIP, Option Bd.	4205445E01		

SEE DETAIL B(40)

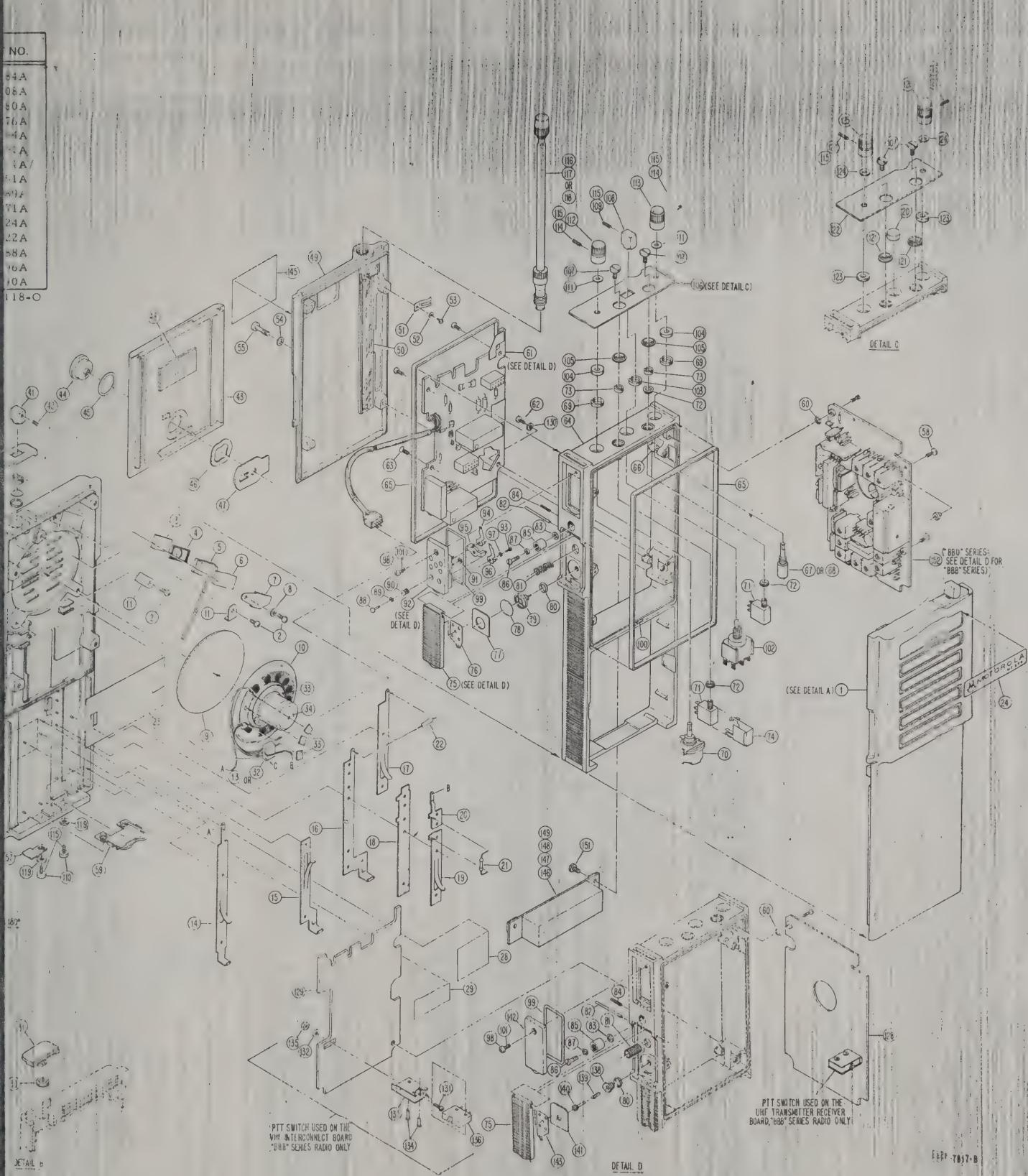
DETAIL B

27

12



NO.
54A
06A
60A
76A
74A
1A
51A
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24A
22A
58A
16A
10A
118-0



PARTS LIST

Exploded New Parts List

PLF-1304-B

ITEM NO.	NOMENCLATURE	MOTOROLA PART NO.
1	COVER, Front, Extended	1505660D01
2	SCREW, Mach 2-56x1/8Phi Pan	0300138651
3	PAD, Mic	3505450B01
4	GASKET, Mic	7505577F01
5	CARTRIDGE, Mic	5982575J02
6	PAD, Clamp	7582745J01
7	BRACKET, Mic	0705672D01
8	WASHER, Spring	0405314E01
9	CLOTH, Felt Grill	3505370C01
10	SPEAKER	5005334D01
11	CLAMP, Speaker	4205670D01
12	CLAMP, Speaker	4205671D01
13	RECEPT, Conn Assy (PL)	0105958C86
14	STRAP, Contact, Neg	4205573A01
15	STRAP, Contact, Sen	4205575A01
16	STRAP, Contact, Charge	4205283E01
17	STRAP, Contact	4205576A01
18	INSULATOR, Contact	1405282E01
19	STRAP, Contact, Pos	4205269G01
20	STRAP, Contact, Pos	4205270G01
21	FUSE	6505214E01
22	RECTIFIE, Silicon	4882466H13
23	INSULATO, Paper	1405447G02
24	NAMEPLATE	3305537E01
25	Not Used	
26	Not Used	
27	ADHES, Silicone Rubber	1110019A88
28	LABEL, Patent	1305436E01
29	LABEL, FCC	5400865436
30	GASKET, Plug	3205315E01
31	PLUG, Cover	3805115E01
32	RECEPT, Conn Assy CS	0105958C87
33	INSULATOR, Speaker	1405311G01
34	TAF, Insulator	1110003E58
35	INSULATOR, Paper	1482392E05
36	SWITCH, Toggle, SPDT	4005061E01
37	GASKET, "O" Ring	3205082E01
38	WASHER, Special	0405081E01
39	NUT, Mgt	0205050E03
40	ESUTCHEON, Switch	1305057E01
41	KNOB, Switch	3605114E01
42	SCREW, Set	0383174C04
43	COVER, Battery	1505697D01
44	BUTTON	3805908D01
45	WASHER	0405910D01
46	WASHER, Spring	0405316E01
47	LATCH	5505907D01
48	PAD	7505083E01
49	COVER, Rear, Extended (SL)	1505039E01
50	SHIELD, Antenna Tube	2605045E01
51	CLIP, Antenna	4205860D01
52	WASHER, Spring	0405314E03
53	SCREW, Antenna Clip	0305044E01
54	WASHER, Seal	0484345A06
55	SCREW, Captive	0305662D09
56	Not Used	
57	INSULATOR, Contact	1405359A01
58	SCREW, Captive	0305864D01
59	LATCH Assy	NLN4181A
60	"O" Ring	3205082E06
61	INTERCON ECT Bd. Assy	
62	SCR, Mach (#-56x3/16Phi Pan)	0300138661
63	SCR, Mach (#-56x1/4 Slot Flt Hd)	0300136666
64	FRAME, Extended	0705640D03
65	GASKET, Frame	3205520G01
66	BUSHING, Cover tg	4305661D01
67	POT, Cermet	1805055E01
68	POT, Cermet Alternate	1805333E01
69	NUT, Special	0282653D03
70	POTENTIOMETER, Control Sw.	1805370E01
71	JACK, Micro	0905657G01
72	BUS' NG, Shoulder	4305052E02
73	NUT, Special	0205050E01
74	SHIELD, Antenna	2605091E01
75	LEVER	4505784D01
76	SPRING, Actuator (PTT)	4105783D03
77	GASKET (PTT)	1205378G01
78	CONTACT, Disc (PTT)	3905196G01
79	CONTACT, Feed-Thru (PTT)	1905196G01
80	SEAL "O" Ring	1205082E04
81	SPRING, Compression (PTT)	4105267E01
82	PIN, Spring	2205084E01
83	WASHER, Insert	0405149E01
84	SCREW, Bet	0305246E01
85	INSERT, Threaded	4305781D01
86	STUD	4605154E01
87	WASHER, Stud	0405248E01

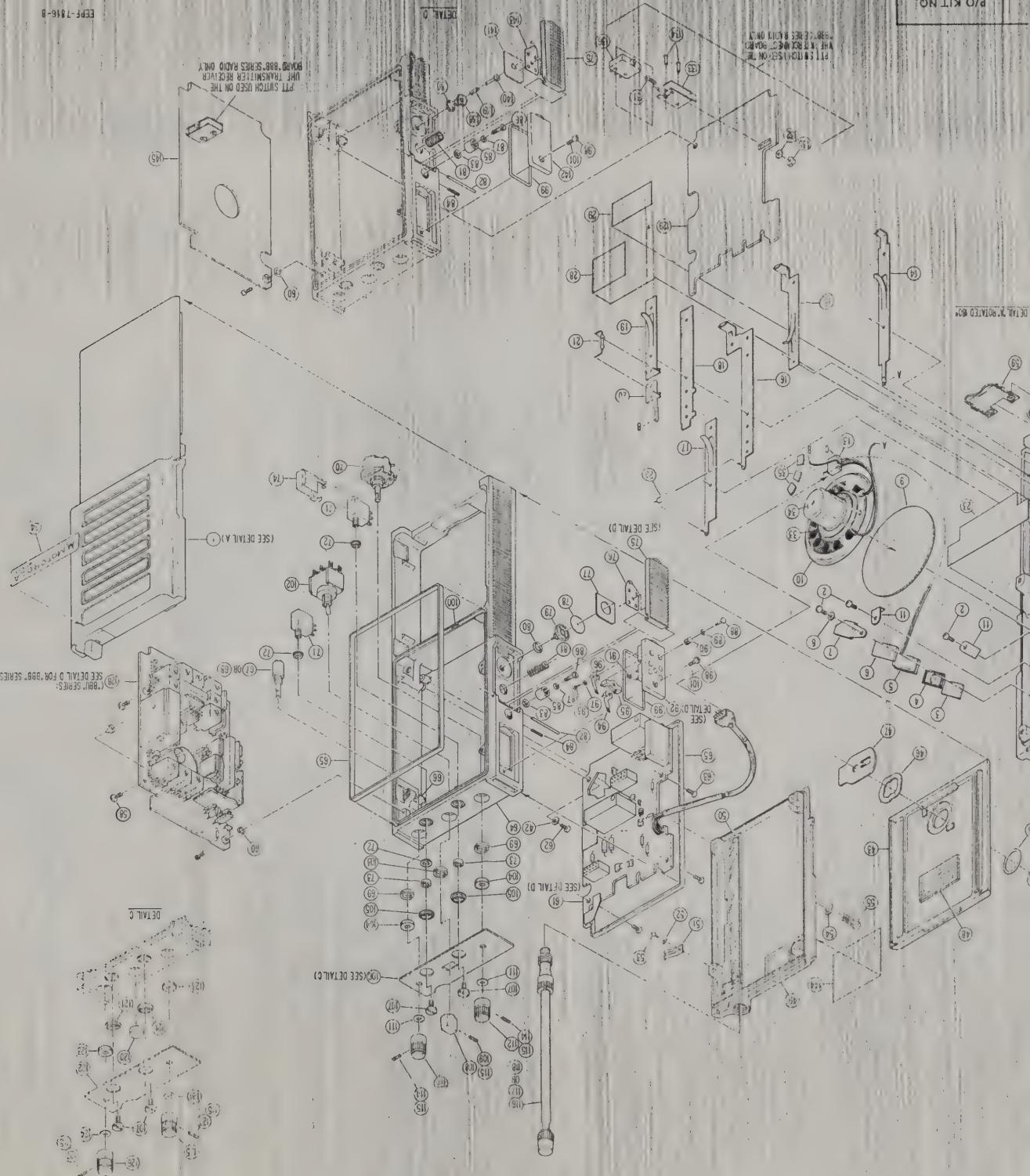
ITEM NO.	NOMENCLATURE	MOTOROLA PART NO.
88	PIN, Contact	3905456E01
89	GASKET, "O" Ring	3205062E01
90	SPRING, Confinision	4105242E01
91	RING, Retaining	4205463E02
92	RECEPTACLE	0905677D01
93	SCREW#0-80x1/8 Fin Hd.	0300139E84
94	CONTACT	4105197G03
95	BLOCK	4605072E01
96	CONTACT	4105197G01
97	WASHER	0400134190
98	SCR, Mach (#-56x3/16 SST)	0300138661
99	SEAL "O" Ring	3205661G01
100	ADHESIVE, RTV Silicone Rubber	1110019A63
101	SEALANT, Compound (PURP)	1110019A63
102	SWITCH, Toggle	4005120E01
103	NUT, Special	0282653D07
104	PAD, Rubber	7583562H02
105	BUSHING, Insulator	4305051E01
106	ESUTCHEON, 2 freq	1305621D03
107	SCREW, Jack	0310129A24
108	KNOB, Switch	3605114E01
109	SCREW, Set	0383174C04
110	SCREW, Latch	0300139E82
111	WASHER, Nylon	0405935F01
112	KNOB, Vol	3605927D01
113	KNOB, Squelch	3605927D03
114	SCREW, Set	0383174C02
115	GLYPTOL	110008675
116	ANTENNA, Telescopic	8505550E01
117	ANTENNA, Telescopic(5 Section	8505549E01
118	ANTENNA, Telescopic(6 Section	8505509E01
119	WASHER, Latch	0400120581
120	PAD, Rubber	7583562H01
121	BUSHING, Insulating	4305051E01
122	ESUTCHEON	1305621D01
123	PAD, Rubber	7583562H02
124	WASHER, Nylon	0405935F01
125	KNOB, Vol	3605927D01
126	KNOB, Squelch	3605927D03
127	SCREW, Set	0383174C02
128	TRANSCIEVER Bd. Assy	NUE6242A
	("BBB" Series)	NUE6243A
		NUE6292A
		NUE6293A
129	INTERCONNECT Bd. Assy	
130	WASHER, Insulated	0400474215
131	SCREW, Special	0305525G01
132	WASHER	0400140015
133	BRACKET, Switch	0705261E01
134	EYELET	0505095E09
135	NUT	0200400865
136	SWITCH, Micro	4005265E01
137	Not Used	
138	NUT, PTT	0205250E01
139	SPRING, PTT	4105252E01
140	ACTUATOR, PTT	4705251E01
141	GASKET, Switch	3205077E01
142	COVER, Receptacle	1505212E01
143	SPRING, Actuator	4105783D01
144	Not Used	
145	PLATE, Information	6405538E01
146	OPTION Deck (Tone PL)	NLN4211A
		NLN4646A
147	OPTION Deck (Digital PL)	NLN4212A
148	OPTION Deck (Selective Call)	NLN4213A
149	OPTION Deck (Single-Tone)	NLN4723A
150	Not Used	
151	SCREW, Hex (#2-56x3/16)	0305493F01
152	TRANSCIEVER Bd. Assy	NUE6231A
	("BBU" Series)	NUE6232A
		NUE6233A
		NUE6212A
		NUE6281A
		NUE6282A
		NUE6283A
		NUE6102A
		NUE6312A
		NUE6313A

ITEM(S)	P/O KIT
1 thru 29 & 36 thru 41	NLN4184
1 thru 31	NLN4203
33 thru 48	NLN4180
49 thru 55	NLN4176
57	NLN4144
60 thru 1D1	NHD6091
60 thru 75, 80 thru 84	NHD6111
98 thru 103, & 130 thru 144	NHD6051
104 thru 115	NLN4189
116	NAE6271
117	NAD6324
118	NAD6322
119 thru 127	NLN4188
145	NLN4196
151	NLN4190

EPF-811



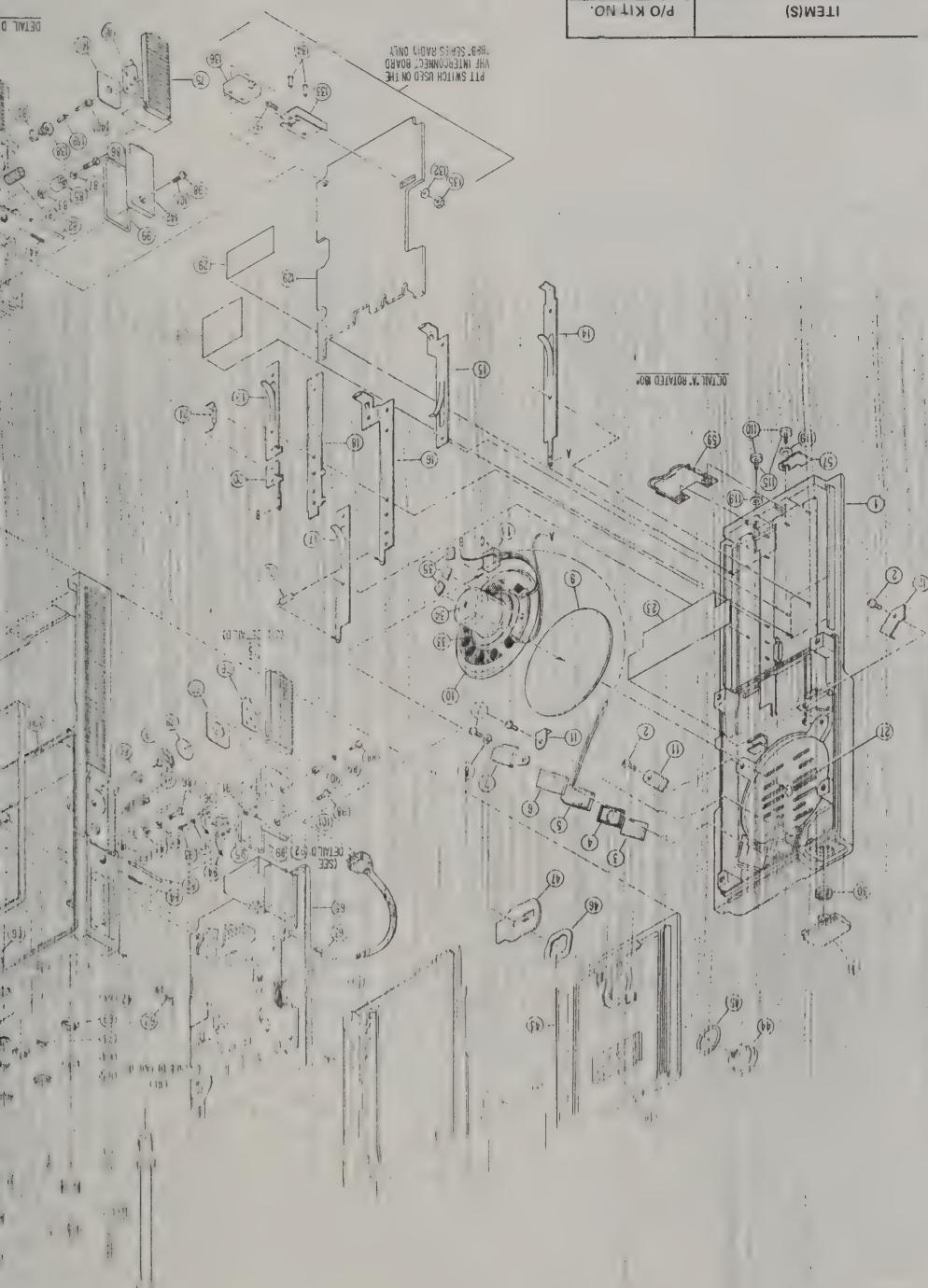
SLIM-LINE, SHORT
C1R1, C2R2



P/O KIT NO

Q1A1207A	Q1A1483A	Q1A176A	Q1A194A	Q1A212A	Q1A227A	Q1A242A	Q1A257A	Q1A272A	Q1A287A	Q1A302A	Q1A317A	Q1A332A	Q1A347A	Q1A362A	Q1A377A	Q1A392A	Q1A407A	Q1A422A	Q1A437A	Q1A452A	Q1A467A	Q1A482A	Q1A497A	Q1A512A	Q1A527A	Q1A542A	Q1A557A	Q1A572A	Q1A587A	Q1A602A	Q1A617A	Q1A632A	Q1A647A	Q1A662A	Q1A677A	Q1A692A	Q1A707A	Q1A722A	Q1A737A	Q1A752A	Q1A767A	Q1A782A	Q1A797A	Q1A812A	Q1A827A	Q1A842A	Q1A857A	Q1A872A	Q1A887A	Q1A902A	Q1A917A	Q1A932A	Q1A947A	Q1A962A	Q1A977A	Q1A992A	Q1A1007A
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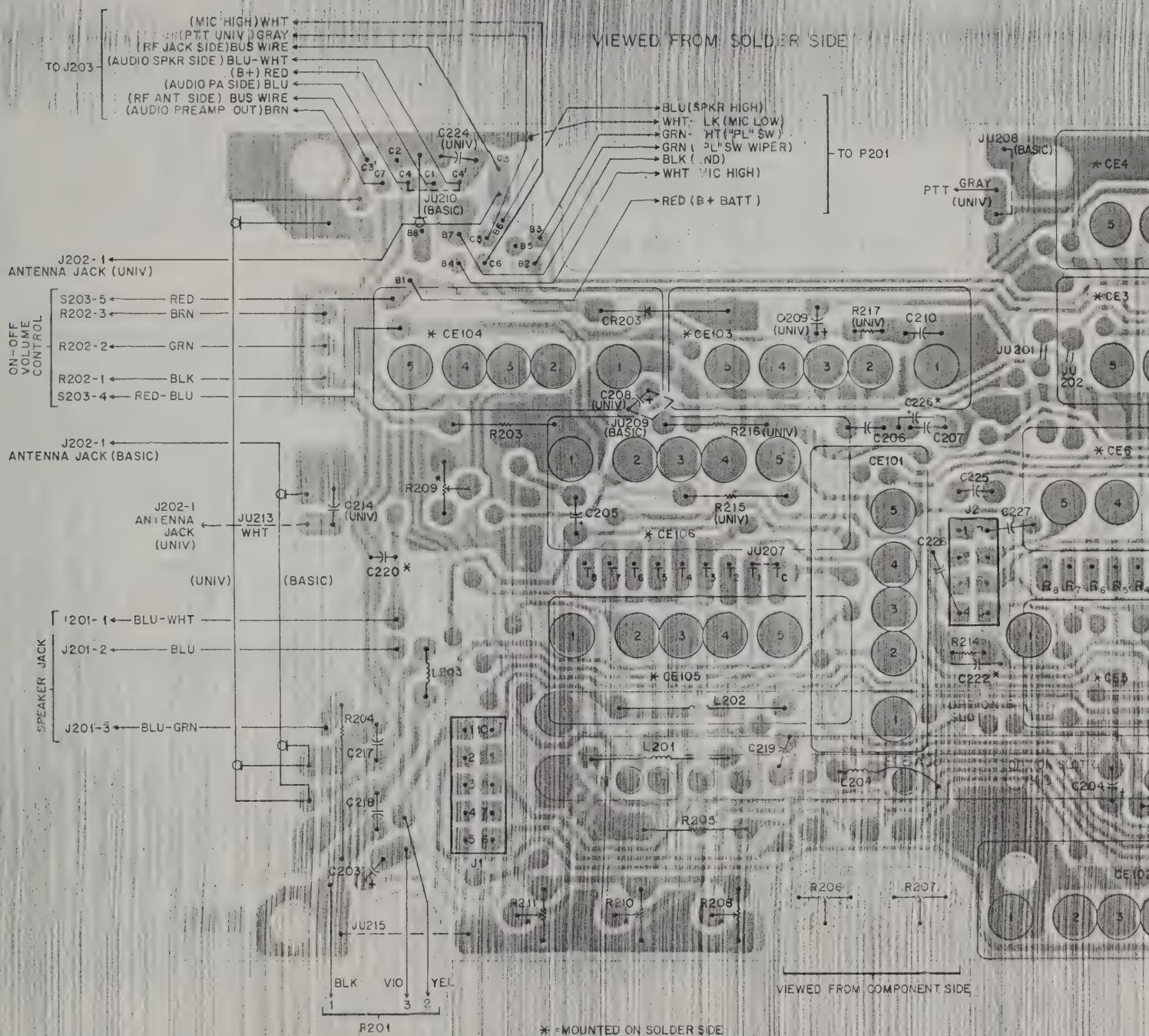


ITEM(S)		P/O KIT NO.
1 thru 31	NLN4207A	4000265E01
1 thru 30 & 36 thru 42	NLN4183A	0200400865
43 thru 48	NLN4108A	050505E09
49 thru 55	NLN4176A	020525E01
57	NLN4194A	410525E01
61 thru 101	NLN4101A	410507E01
61 thru 103	NHD6001A	150512E01
61 thru 105	NHD6081A	410518E01
61 thru 107	NAD6324A	410553E01
61 thru 109	NAD6322A	410562E01
104 thru 115	NAD632A	410562A
98 thru 103, & 130 thru 144	NHD6041A	410562A
61 thru 75, 80 thru 84,	NHD6101A	410562A
61 thru 103	NAD6271A	410562A
61 thru 105	NAD6271A	410562A
116	NLN4189A	410562A
117	NAD6324A	410562A
118	NAD6322A	410562A
119 thru 127	NLN4188A	410562A

ITEM(S)	P/O KIT NO.	DESCRIPTION
121	0400140015	SCRW, Special
122	0305525G01	WASHER, Specia
123	0400140015	SCRW, Specia
124	0305035E01	WASHER, Nuts
125	3605927D01	KNOB, Vol.
126	7583562H01	PAD, Rubber
127	0383174C02	SCRW, Set
128	0383174C02	TRANSCEIVER BD Array
129	0405335E01	PAD, Rubber
130	1305621D01	SCREW, 1/4-20
131	1305621D01	SCREW, 1/4-20
132	0383174C02	SCREW, 1/4-20
133	0405354E01	ANTENNA, Telescopi
134	850550865	SCREW, 1/4-20
135	8505509E01	ANTENNA, Telescopi
136	850554E01	SCREW, 1/4-20
137	110001205081	SCREW, 1/4-20
138	0383174C04	SCREW, 1/4-20
139	0300139982	SCREW, 1/4-20
140	040535E01	SCREW, 1/4-20
141	3605927D01	KNOB, Vol.
142	7583562H01	PAD, Rubber
143	0383174C02	SCRW, Set
144	3605927D01	KNOB, Vol.
145	0405335E01	SCREW, 1/4-20
146	1305621D01	SCREW, 1/4-20
147	0383174C02	SCREW, 1/4-20
148	0405354E01	ANTENNA, Telescopi
149	850550865	SCREW, 1/4-20
150	0383174C02	SCREW, 1/4-20
151	1100019A8	SCREW, 1/4-20
152	1100019A6	SCREW, 1/4-20
153	4105621D03	KNOB, Vol.
154	3605927D01	KNOB, Vol.
155	0282653D07	PAD, Rubber
156	4005120E01	SCREW, 1/4-20
157	7583562H01	PAD, Rubber
158	0383174C04	SCREW, 1/4-20
159	0300139982	SCREW, 1/4-20
160	040535E01	SCREW, 1/4-20
161	3605927D01	KNOB, Vol.
162	7583562H01	PAD, Rubber
163	0383174C02	SCRW, Set
164	8505509E01	ANTENNA, Telescopi
165	850554E01	SCREW, 1/4-20
166	110001205081	SCREW, 1/4-20
167	0383174C04	SCREW, 1/4-20
168	0300139982	SCREW, 1/4-20
169	040535E01	SCREW, 1/4-20
170	3605927D01	KNOB, Vol.
171	7583562H01	PAD, Rubber
172	0383174C02	SCRW, Set
173	0405354E01	ANTENNA, Telescopi
174	850550865	SCREW, 1/4-20
175	0383174C02	SCREW, 1/4-20
176	110001205081	SCREW, 1/4-20
177	0383174C04	SCREW, 1/4-20
178	0300139982	SCREW, 1/4-20
179	040535E01	SCREW, 1/4-20
180	3605927D01	KNOB, Vol.
181	7583562H01	PAD, Rubber
182	0383174C02	SCRW, Set
183	0405354E01	ANTENNA, Telescopi
184	850550865	SCREW, 1/4-20
185	0383174C02	SCREW, 1/4-20
186	110001205081	SCREW, 1/4-20
187	0383174C04	SCREW, 1/4-20
188	0300139982	SCREW, 1/4-20
189	040535E01	SCREW, 1/4-20
190	3605927D01	KNOB, Vol.
191	7583562H01	PAD, Rubber
192	0383174C02	SCRW, Set
193	0405354E01	ANTENNA, Telescopi
194	850550865	SCREW, 1/4-20
195	0383174C02	SCREW, 1/4-20
196	110001205081	SCREW, 1/4-20
197	0383174C04	SCREW, 1/4-20
198	0300139982	SCREW, 1/4-20
199	040535E01	SCREW, 1/4-20
200	320561G01	ADHESIVE, RTV
201	3205661G01	SEALANT, RTV
202	4005120E01	SWITCH, Toggle
203	0383174C02	NUT, Special
204	0282653D07	PAD, Rubber
205	4005120E01	SCREW, 1/4-20
206	4005120E01	SCREW, 1/4-20
207	3605927D01	KNOB, Switch
208	7583562H01	PAD, Rubber
209	0383174C04	SCREW, 1/4-20
210	0300139982	SCREW, 1/4-20
211	040535E01	SCREW, 1/4-20
212	3605927D01	KNOB, Switch
213	7583562H01	PAD, Rubber
214	0383174C02	SCRW, Set
215	0405354E01	ANTENNA, Telescopi
216	850550865	SCREW, 1/4-20
217	0383174C02	SCREW, 1/4-20
218	110001205081	SCREW, 1/4-20
219	0383174C04	SCREW, 1/4-20
220	0300139982	SCREW, 1/4-20
221	040535E01	SCREW, 1/4-20
222	3605927D01	KNOB, Switch
223	7583562H01	PAD, Rubber
224	0383174C02	SCRW, Set
225	0405354E01	ANTENNA, Telescopi
226	850550865	SCREW, 1/4-20
227	0383174C02	SCREW, Set
228	0405354E01	ANTENNA, Telescopi
229	850550865	SCREW, 1/4-20
230	0383174C02	SCREW, Set
231	0405354E01	ANTENNA, Telescopi
232	850550865	SCREW, 1/4-20
233	0383174C02	SCREW, Set
234	0405354E01	ANTENNA, Telescopi
235	850550865	SCREW, 1/4-20
236	0383174C02	SCREW, Set
237	0405354E01	ANTENNA, Telescopi
238	850550865	SCREW, 1/4-20
239	0383174C02	SCREW, Set
240	0405354E01	ANTENNA, Telescopi
241	850550865	SCREW, 1/4-20
242	0383174C02	SCREW, Set
243	0405354E01	ANTENNA, Telescopi
244	850550865	SCREW, 1/4-20
245	0383174C02	SCREW, Set
246	0405354E01	ANTENNA, Telescopi
247	850550865	SCREW, 1/4-20
248	0383174C02	SCREW, Set
249	0405354E01	ANTENNA, Telescopi
250	850550865	SCREW, 1/4-20
251	0383174C02	SCREW, Set
252	0405354E01	ANTENNA, Telescopi
253	850550865	SCREW, 1/4-20
254	0383174C02	SCREW, Set
255	0405354E01	ANTENNA, Telescopi
256	850550865	SCREW, 1/4-20
257	0383174C02	SCREW, Set
258	0405354E01	ANTENNA, Telescopi
259	850550865	SCREW, 1/4-20
260	0383174C02	SCREW, Set
261	0405354E01	ANTENNA, Telescopi
262	850550865	SCREW, 1/4-20
263	0383174C02	SCREW, Set
264	0405354E01	ANTENNA, Telescopi
265	850550865	SCREW, 1/4-20
266	0383174C02	SCREW, Set
267	0405354E01	ANTENNA, Telescopi
268	850550865	SCREW, 1/4-20
269	0383174C02	SCREW, Set
270	0405354E01	ANTENNA, Telescopi
271	850550865	SCREW, 1/4-20
272	0383174C02	SCREW, Set
273	0405354E01	ANTENNA, Telescopi
274	850550865	SCREW, 1/4-20
275	0383174C02	SCREW, Set
276	0405354E01	ANTENNA, Telescopi
277	850550865	SCREW, 1/4-20
278	0383174C02	SCREW, Set
279	0405354E01	ANTENNA, Telescopi
280	850550865	SCREW, 1/4-20
281	0383174C02	SCREW, Set
282	0405354E01	ANTENNA, Telescopi
283	850550865	SCREW, 1/4-20
284	0383174C02	SCREW, Set
285	0405354E01	ANTENNA, Telescopi
286	850550865	SCREW, 1/4-20
287	0383174C02	SCREW, Set
288	0405354E01	ANTENNA, Telescopi
289	850550865	SCREW, 1/4-20
290	0383174C02	SCREW, Set
291	0405354E01	ANTENNA, Telescopi
292	850550865	SCREW, 1/4-20
293	0383174C02	SCREW, Set
294	0405354E01	ANTENNA, Telescopi
295	850550865	SCREW, 1/4-20
296	0383174C02	SCREW, Set
297	0405354E01	ANTENNA, Telescopi
298	850550865	SCREW, 1/4-20
299	0383174C02	SCREW, Set
300	0405354E01	ANTENNA, Telescopi
301	850550865	SCREW, 1/4-20
302	0383174C02	SCREW, Set
303	0405354E01	ANTENNA, Telescopi
304	850550865	SCREW, 1/4-20
305	0383174C02	SCREW, Set
306	0405354E01	ANTENNA, Telescopi
307	850550865	SCREW, 1/4-20
308	0383174C02	SCREW, Set
309	0405354E01	ANTENNA, Telescopi
310	850550865	SCREW, 1/4-20
311	0383174C02	SCREW, Set
312	0405354E01	ANTENNA, Telescopi
313	850550865	SCREW, 1/4-20
314	0383174C02	SCREW, Set
315	0405354E01	ANTENNA, Telescopi
316	850550865	SCREW, 1/4-20
317	0383174C02	SCREW, Set
318	0405354E01	ANTENNA, Telescopi
319	850550865	SCREW, 1/4-20
320	0383174C02	SCREW, Set
321	0405354E01	ANTENNA, Telescopi
322	850550865	SCREW, 1/4-20
323	0383174C02	SCREW, Set
324	0405354E01	ANTENNA, Telescopi
325	850550865	SCREW, 1/4-20
326	0383174C02	SCREW, Set
327	0405354E01	ANTENNA, Telescopi
328	850550865	SCREW, 1/4-20
329	0383174C02	SCREW, Set
330	0405354E01	ANTENNA, Telescopi
331	850550865	SCREW, 1/4-20
332	0383174C02	SCREW, Set
333	0405354E01	ANTENNA, Telescopi
334	850550865	SCREW, 1/4-20
335	0383174C02	SCREW, Set
336	0405354E01	ANTENNA, Telescopi
337	850550865	SCREW, 1/4-20
338	0383174C02	SCREW, Set
339	0405354E01	ANTENNA, Telescopi
340	850550865	SCREW, 1/4-20
341	0383174C02	SCREW, Set
342	0405354E01	ANTENNA, Telescopi
343	850550865	SCREW, 1/4-20
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347	0383174C02	SCREW, Set
348	0405354E01	ANTENNA, Telescopi
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361	850550865	SCREW, 1/4-20
362	0383174C02	SCREW, Set
363	0405354E01	ANTENNA, Telescopi
364	850550865	SCREW, 1/4-20
365	0383174C02	SCREW, Set
366	0405354E01	ANTENNA, Telescopi
367	850550865	SCREW, 1/4-20
368	0	



ITEM	NOMENCLATURE	PART NO.	PART NO.
1	COVER, Front, Extended	150563301	3000138651
2	PAD, Mid	7505577501	1505577501
3	CARTRIDGE, Mid	5928575702	7582745101
4	PAD, Mid	7505672701	0705672701
5	BRACKET, Mid	5928575702	7582745101
6	PAD, Clip-in	0705672701	0705672701
7	WASHER, Spring	0405311E01	0405311E01
8	WASHER, Spring	4205269501	4205269501
9	SPRAYER, Fine	35003341001	35003341001
10	SPRAYER, Fine	42050101001	35003341001
11	CLAMP, Sprayer	42050101001	35003341001
12	CLAMP, Sprayer	42050101001	35003341001
13	RECEPT, Sprayer	42050101001	35003341001
14	STRAPE, Grommet, Graft	05577401	05577401
15	STRAPE, Grommet, Graft	05577401	05577401
16	STRAPE, Grommet, Graft	05577401	05577401
17	STRAPE, Grommet, Graft	05577401	05577401
18	INSULATOR, Contact	4205269501	4205269501
19	STRAPE, Contact, Pos	4205269501	4205269501
20	STRAPE, Contact, Pos	4205269501	4205269501
21	FUSE	4205269501	4205269501
22	RECEPT, Sprayer	14055547001	14055547001
23	INSULATOR, Paper	4882466H13	4882466H13
24	NAMEPLATE	3305537E01	3305537E01
25	NOT USED	4105197G03	4105197G03
26	CONTACT	46050277001	46050277001
27	REDCRATCH	0905677D01	0905677D01
28	SWITCH, Toggle	4005120E01	4005120E01
29	NOT USED	3082653D03	3082653D03
30	NOT USED	0300137404	0300137404
31	NOT USED	36051121001	36051121001
32	NOT USED	400474215	400474215
33	INSULATOR, Sprayer	1405311E01	1405311E01
34	TAPE, Insulator, Paper	1100035E05	1100035E05
35	INSULATOR, Paper	1482392E05	1482392E05
36	NOT USED	3050515E01	3050515E01
37	NOT USED	40282653D01	40282653D01
38	NOT USED	0300139825	0300139825
39	NOT USED	0300137404	0300137404
40	NOT USED	04001020E01	04001020E01
41	WASHER, Insulated	1505697D01	1505697D01
42	WASHER, Insulated	3605927D03	3605927D03
43	COVER, Rear	1100194A88	1100194A88
44	BUTTON	0405010D01	0405010D01
45	WASHER, Button	5505090D01	5505090D01
46	WASHER, Spring	0405316E01	0405316E01
47	LATCH	0405010D01	0405010D01
48	PAD	1505083E01	1505083E01
49	COVER, Rear	04001020E01	04001020E01
50	SHIELD, Antenna Tube	2605045E01	2605045E01
51	CLIP, Antenna	053140E03	053140E03
52	WASHER, Spring	4205080D01	4205080D01
53	SCREW, Seal	1505696D01	1505696D01
54	WASHER, Seal	05044E01	05044E01
55	SCREW, Capitive	18435A06	18435A06
56	NOT USED	05662D09	05662D09
57	INSULATOR, Contact	1405359E01	1405359E01
58	SCREW, Capitive	123	123
59	SCREW, Capitive	127	127
60	“O” Ring	128	128
61	INTERCONNECT BD, Assy	3205082E06	3205082E06
62	SCR, Mach(2-56x1/16PFLH)	0300138661	0300138661
63	FRAME, Short	0705547D03	0705547D03
64	GASKET, Frame	3605927D03	3605927D03
65	BUSSING, Short	3683562H02	3683562H02
66	SCR, Mach(2-56x1/16PFLH)	0300136661	0300136661
67	POT, Cover Mfg	43056550E01	43056550E01
68	POT, Ceramic	1805333E01	1805333E01
69	POT, Ceramic Alternative	1805055E01	1805055E01
70	POTENTIOMETER, Control SW	1805265D03	1805265D03
71	JACK, Micro	0905657G01	0905657G01
72	BUSSING, Short	0208265D03	0208265D03
73	SHIELD, Antenna	260505E01	260505E01
74	SHIELD, Antenna	1805054E01	1805054E01
75	LEVER	4505784D01	4505784D01
76	SPRING, Actuator	4105738D03	4105738D03
77	CONTACT, Disc (PTT)	3905195G01	3905195G01
78	CONTACT, Disc (PTT)	3905215E01	3905215E01
79	CONTACT, Disc (PTT)	4705215E01	4705215E01
80	SEAL, O, Ring	0205084E01	0205084E01
81	SPRING, Compression (PTT)	3205082E06	3205082E06
82	PIN, Spring	220505E01	220505E01
83	WASHER, Insulated	0705215E01	0705215E01
84	WASHER, Insulated	1505250E01	1505250E01
85	WASHER, Insulated	040010015	040010015
86	WASHER, Insulated	0505090E09	0505090E09
87	WASHER, Stud	0200400865	0200400865
88	SWITCH, Micro	137	137
89	SWITCH, Special	130	130
90	SWITCH, Special	131	131
91	SWITCH, Special	132	132
92	SWITCH, Special	133	133
93	SWITCH, Special	134	134
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101	SWITCH, Special	142	142
102	SWITCH, Special	143	143
103	SWITCH, Special	144	144
104	SWITCH, Special	145	145
105	BUSHING, Insulator	105	105
106	ESCUTCHION, 2 freeg	106	106
107	SCRW, Jack	107	107
108	KNOB, Switch	108	108
109	SCRW, Latch	109	109
110	SCRW, Set	110	110
111	WASHER, Vol	111	111
112	WASHER, Vol	112	112
113	KNOB, Vol	113	113
114	SCRW, Special	114	114
115	CLIPS	115	115
116	ANTENNA, Telescop(2.56)Section	116	116
117	ANTENNA, Telescop(2.56)Section	117	117
118	ANTENNA, Telescop(2.56)Section	118	118
119	WASHER, Latch	119	119
120	WASHER, Latch	120	120
121	BUSHING, Insulator	121	121
122	ESCUTCHION, 1 freeg	122	122
123	PAD, Rubber	123	123
124	WASHER, Nylon	124	124
125	KNOB, Vol	125	125
126	KNOB, Special	126	126
127	SCRW, Set	127	127
128	TRANGIVER BD Assy	128	128
129	“P/N” Series	129	129
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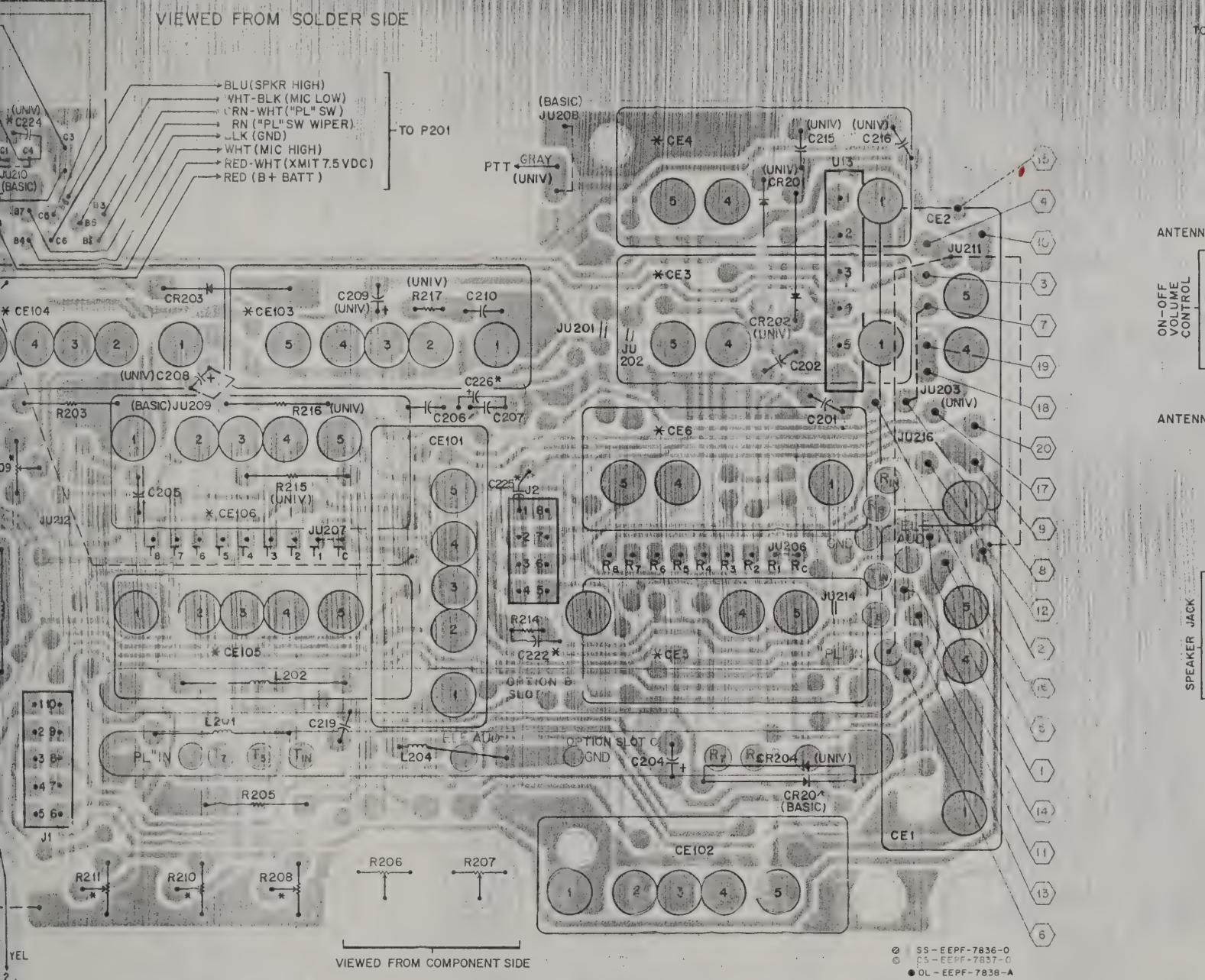
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 *NHE6011A-1 & Later
 HE6081A-1 & Later
 NHE6091A-1 & Later

NHE6151A-1 & Later
 NHE6161A-1 & Later
 NHE6021A-1 & Later
 NHE6031A-1 & Later

NHE6041A-1 & Later
 NHE6051A-1 & Later
 NHE6061A-1 & Later
 NHE6071A-1 & Later

NHE6111A-1 & Later
 NHE6121A-1 & Later
 NHE6131A-1 & Later
 NHE6141A-1 & Later

NHE61
 NHE62



NHE6151A
NHE6161A
NHE6021A
NHE6031A

NHE6041A
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NHE6071A

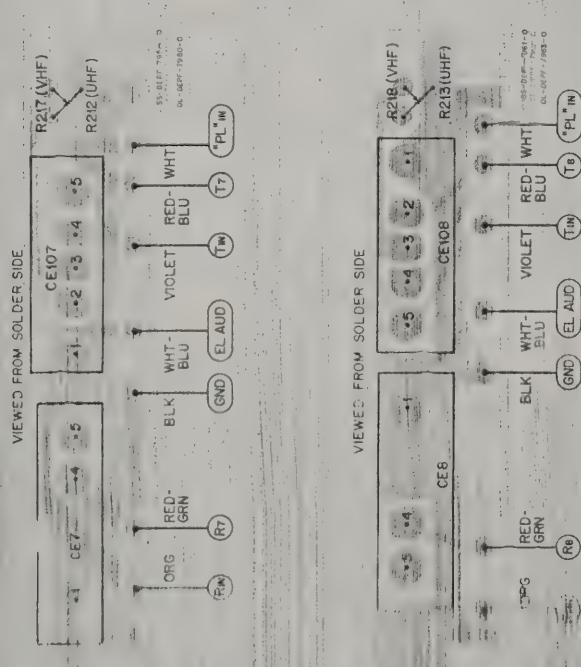
NHE6111A
NHE6121A
NHE6131A
NHE6141A

INTERCONNECT BOARD OPTION TIE POINTS

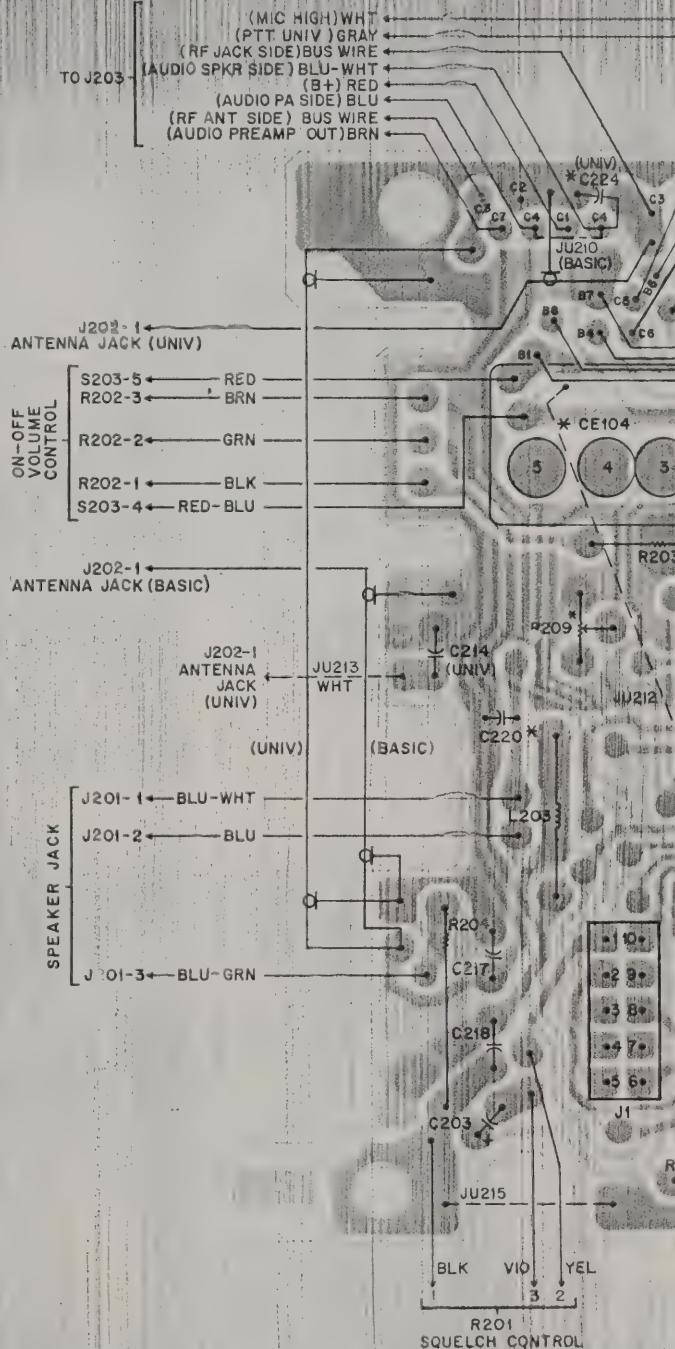
- 1 GROUND
- 2 SQUELCH CONTROL VOLTAGE
- 3 "PL" SWITCH S401-2
- 4 "PL" SWITCH S401-1
- 5 DETECTOR OUTPUT
- 6 TRANSMIT "PL"
- 7 PTT (UNIVERSAL RADIOS ONLY)
- 8 RELAY COIL INPUT (UNIVERSAL RADIOS ONLY)
- 9 +7.5 VDC REGULATED
- 10 BATTERY B+
- 11 DETECTOR LIMITER OUTPUT
- 12 +7.5 VDC REGULATED (RECEIVE ONLY)
- 13 RECEIVER AUDIO PREAMPLIFIER OUTPUT
- 14 VOLUME CONTROL, R202-3
- 15 +7.5 VDC REGULATED (TRANSMIT ONLY)
- 16 ID TONE INPUT
- 17 RECEIVER AUDIO POWER AMPLIFIER INPUT
- 18 (TIE POINT WITH 19)
- 19 (TIE POINT WITH 18)
- 20 SPEAKER, J201-2

EPF-7877-0

C7R7 CHANNEL ELEMENT DECK

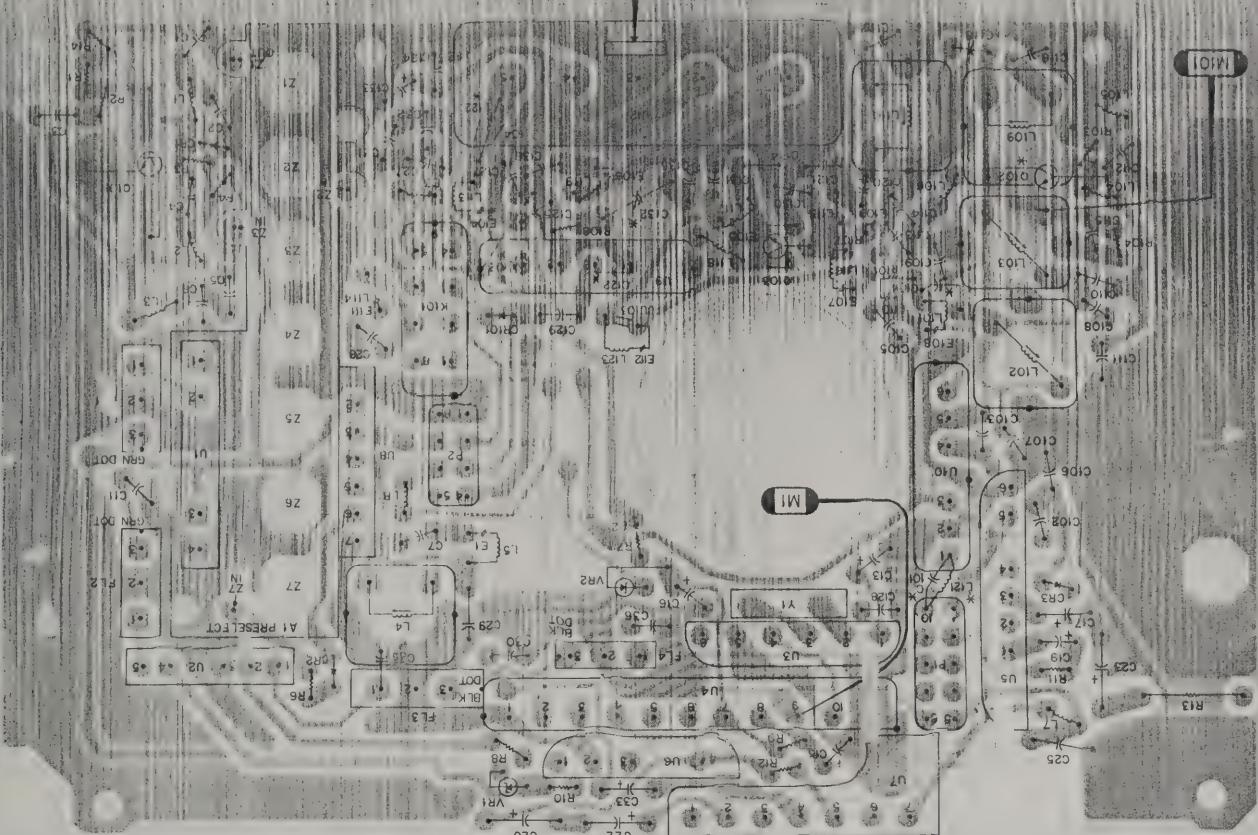


C8R8 CHANNEL ELEMENT DECK

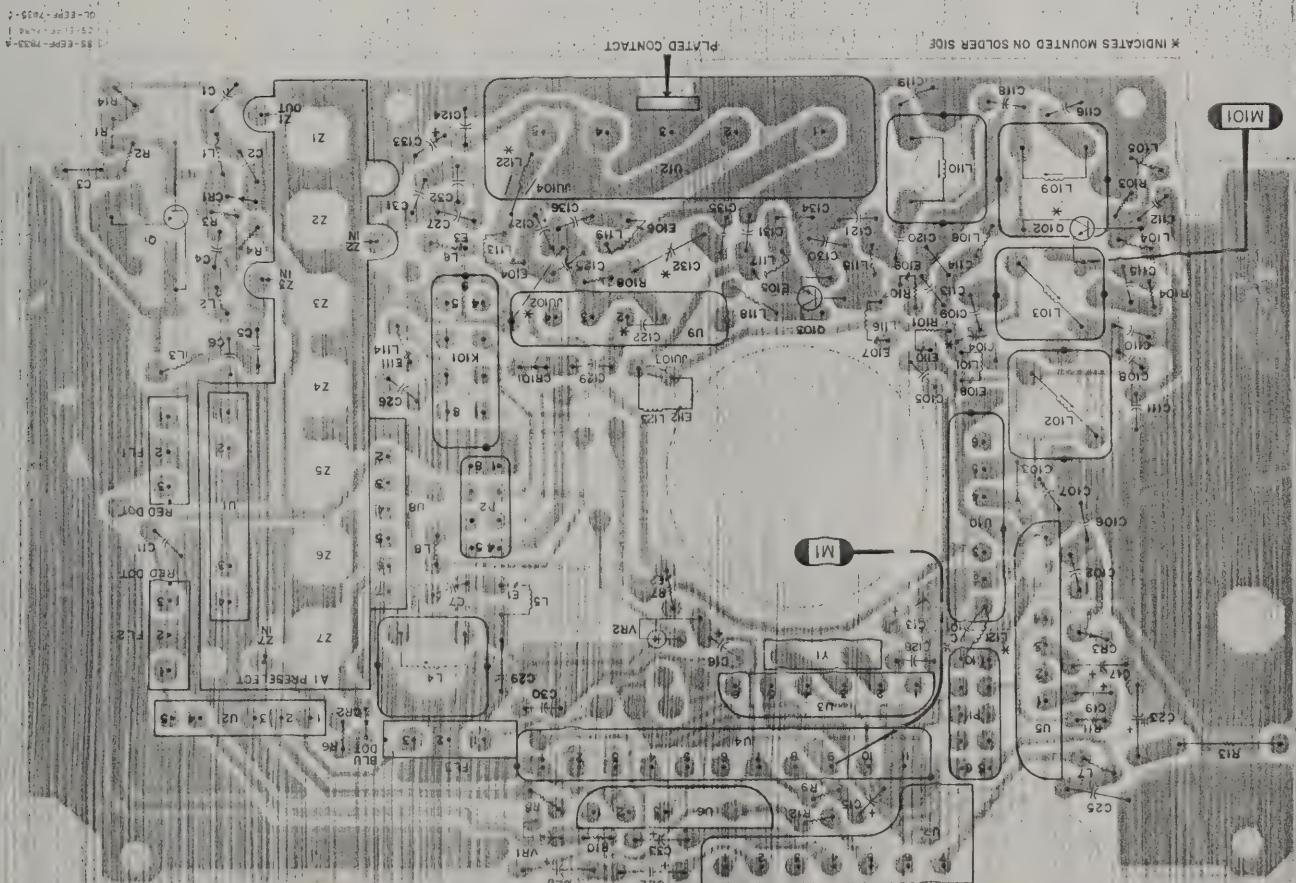


NHE6001A
NHE6011A
NHE6081A
NHE6091A

DETAIL AND PARTS LIST
"BBU" SERIES CIRCUIT BOARD



NUE6282A & NUE6283A (Viewed from Solder Side)



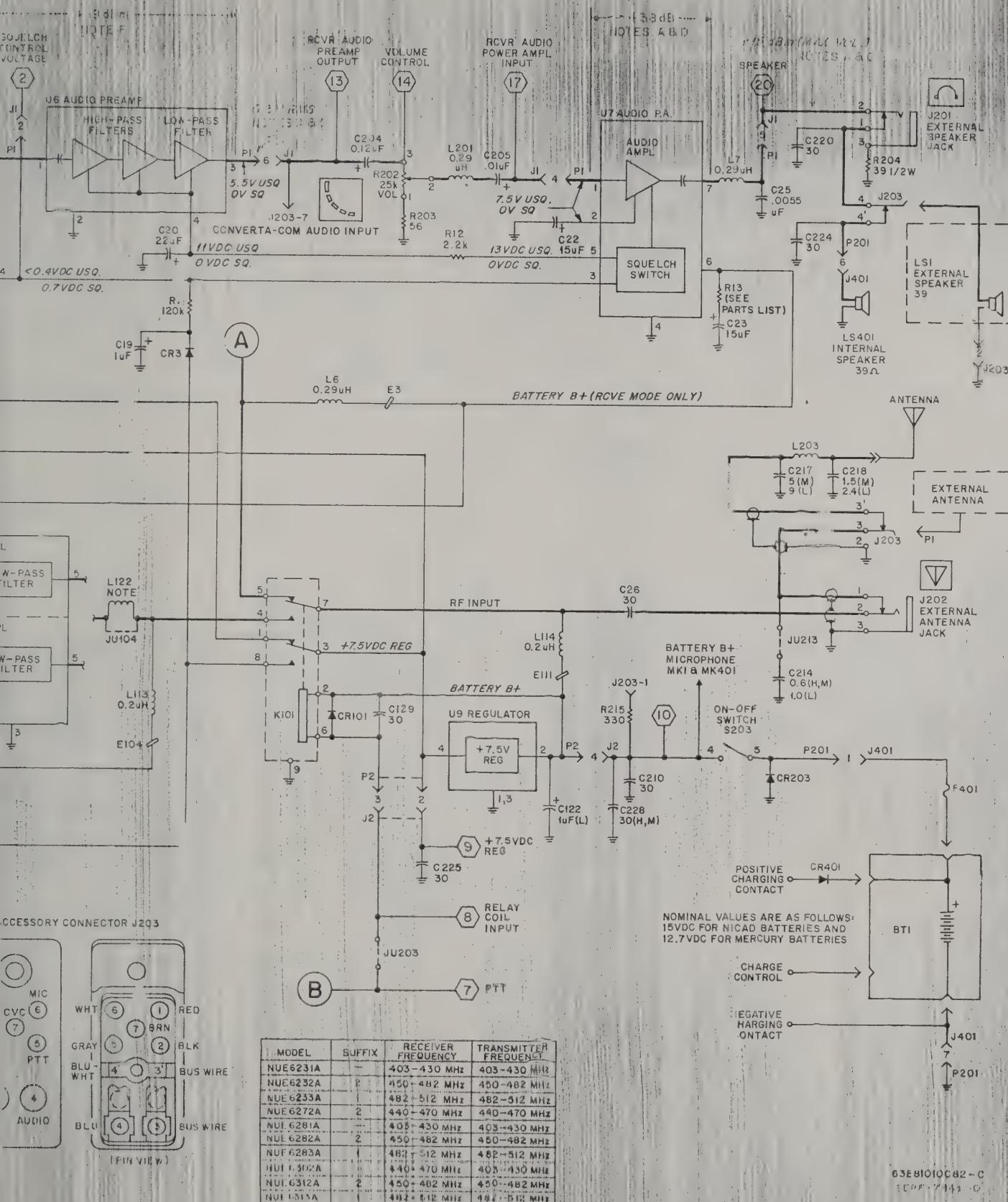
NUE6282A & NUE6283A (Viewed from Solder Side)



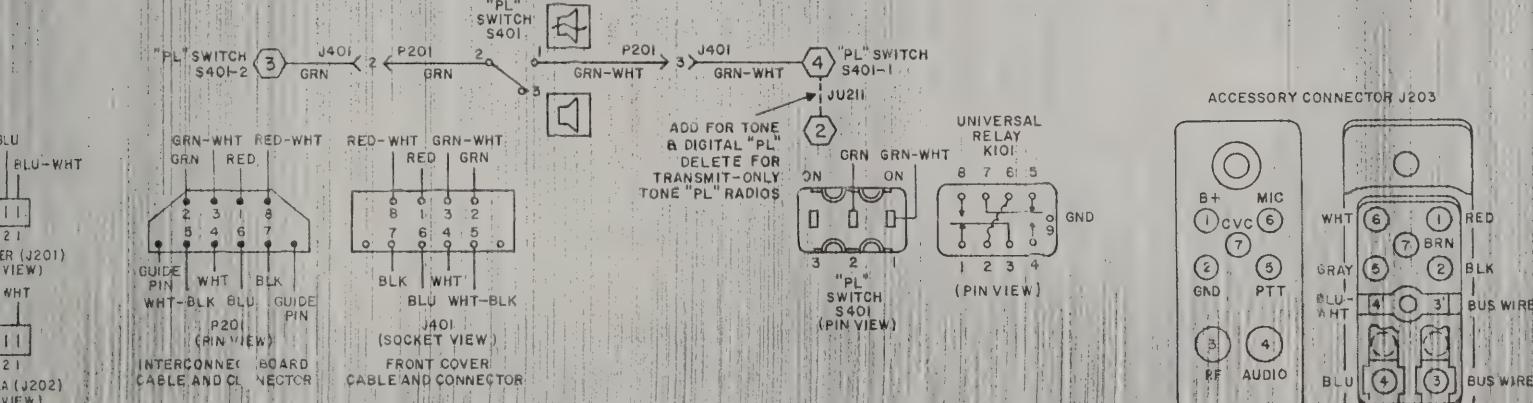
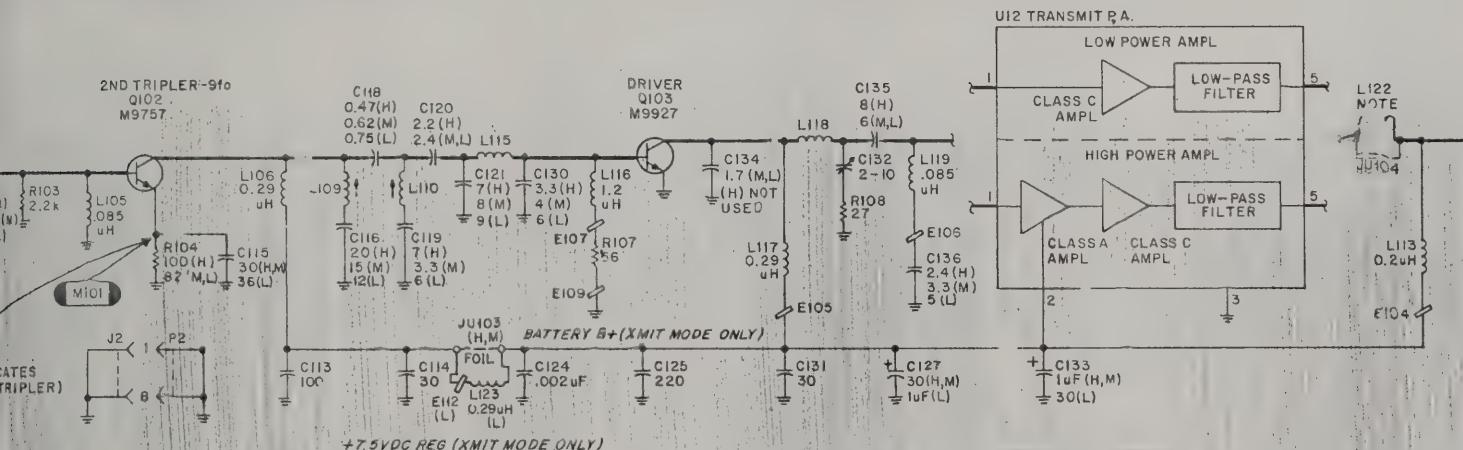
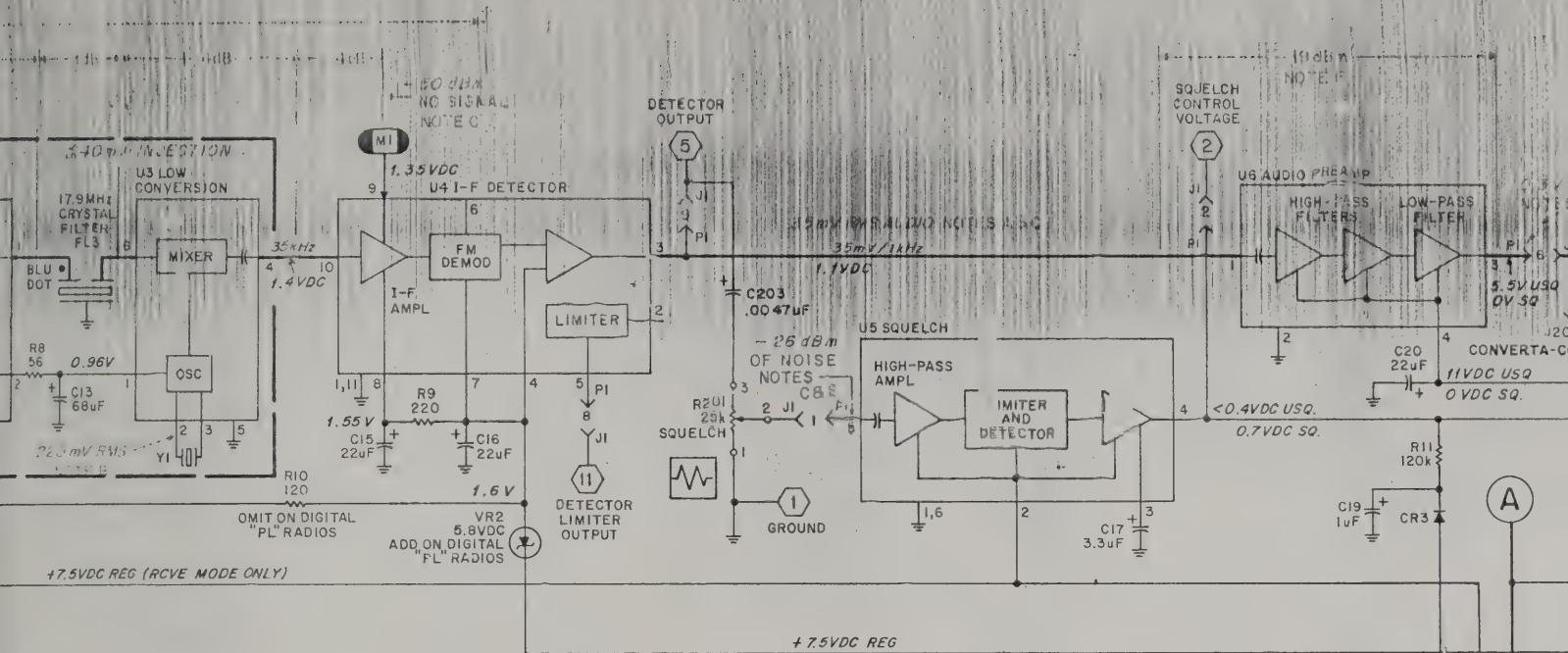
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1116	U12	U12	U12
1117	U13	U13	U13
1118	U14	U14	U14
1119	U15	U15	U15
1120	U16	U16	U16
1121	U17	U17	U17
1122	U18	U18	U18
1123	U19	U19	U19
1124	U20	U20	U20
1125	U21	U21	U21
1126	U22	U22	U22
1127	U23	U23	U23
1128	U24	U24	U24
1129	U25	U25	U25
1130	U26	U26	U26
1131	U27	U27	U27
1132	U28	U28	U28
1133	U29	U29	U29
1134	U30	U30	U30
1135	U31	U31	U31
1136	U32	U32	U32
1137	U33	U33	U33
1138	U34	U34	U34
1139	U35	U35	U35
1140	U36	U36	U36
1141	U37	U37	U37
1142	U38	U38	U38
1143	U39	U39	U39
1144	U40	U40	U40
1145	U41	U41	U41
1146	U42	U42	U42
1147	U43	U43	U43
1148	U44	U44	U44
1149	U45	U45	U45
1150	U46	U46	U46
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1392	U288	U288	U288
1393			

NOTE: 1. For optimum performance, order replacement diodes	
1505894DD1	COVER, DDC (p/o interconnection)
15059306D02	MODULE, E PAD (for U4)
15059306D03	MODULE, E PAD (for U3)
15059306D04	MODULE, E PAD (for U2)
15059306D05	MODULE, E PAD (for U1)
15059306D06	MODULE, E PAD (for U6)
15059306D07	MODULE, E PAD (for U7)
15059306D08	MODULE, E PAD (for U8, U10)
15059306D09	MODULE, PAD (for U9)
1405575F01	BOOT, Crystal Filter
1405575F02	(for FL1, FL3)
1405611F01	INSULATOR (for U13)

REF. NO.	DESCRIPTION	ART. NO.
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C2	2100861428	3105177D56
C3	2182358G95	3105177D56
C4	2100861429	3105177D56
C5	2182358G96	3105177D56
C6	2184008E16	3105177D56
C7	2182358G96	3105177D56
C8	2100861428	3105177D56
C9	2182358G95	3105177D56
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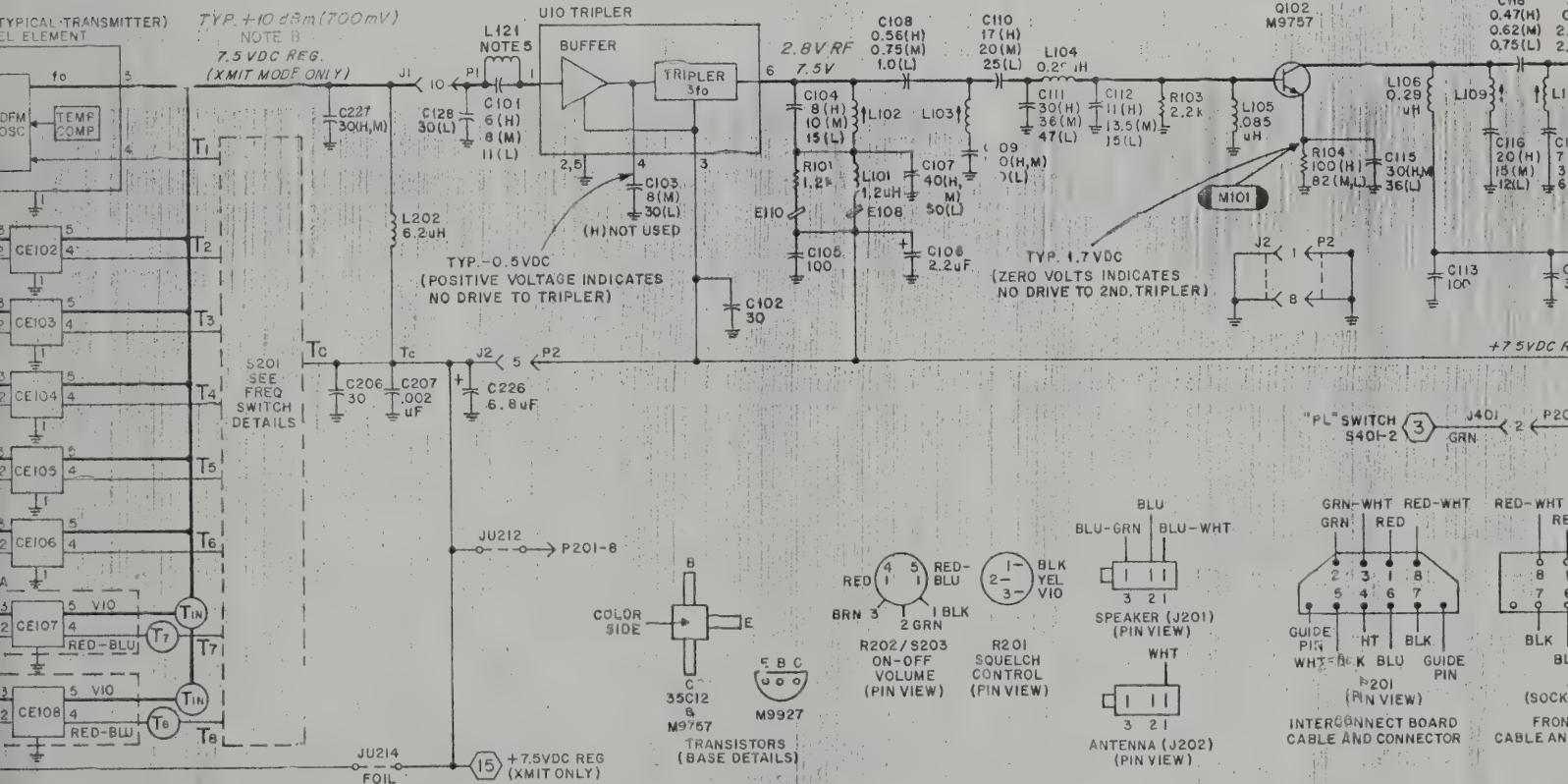
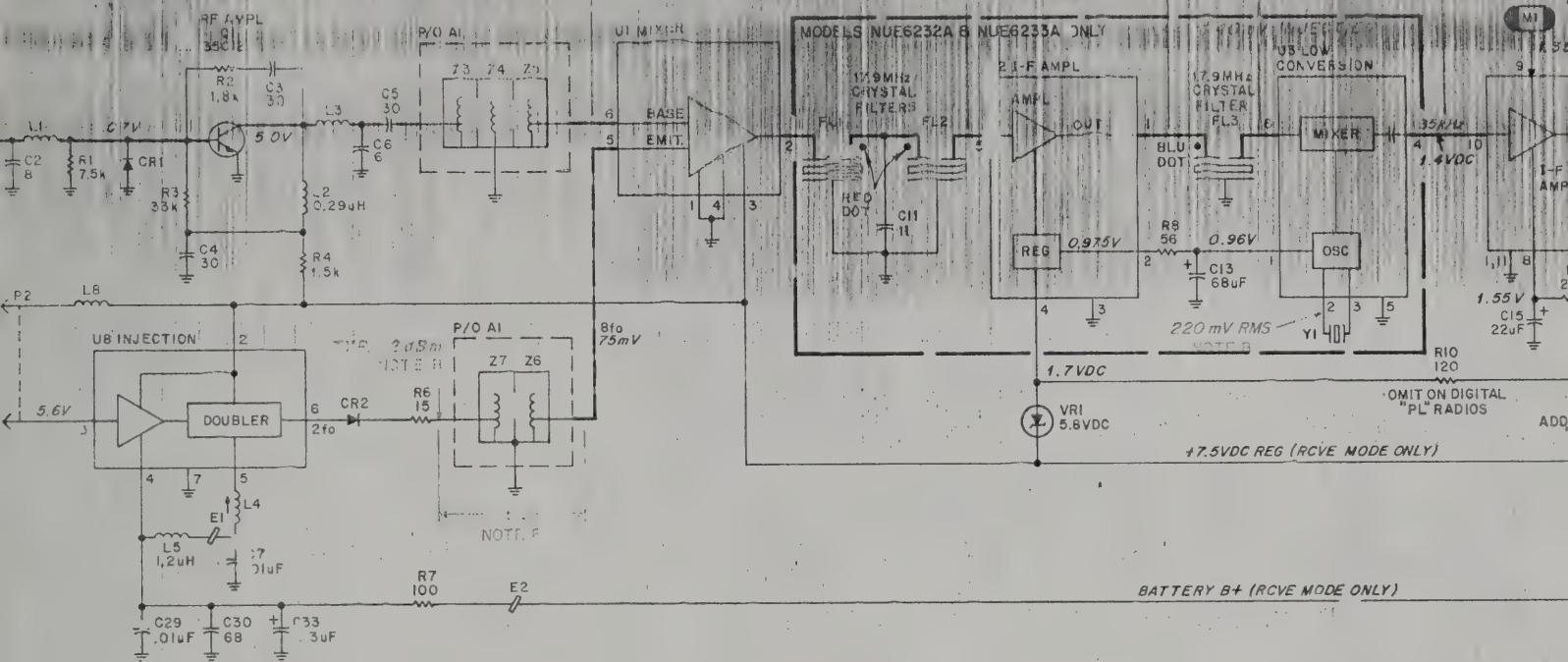
MODEL	SUFFIX	RECEIVER FREQUENCY	TRANSMITTER FREQUENCY
NUE6231A	—	403 - 430 MHz	403 - 430 MHz
NUE6232A	2	450 - 482 MHz	460 - 482 MHz
NUE6233A	—	482 - 512 MHz	482 - 512 MHz
NUE6272A	2	440 - 470 MHz	440 - 470 MHz
NUE6281A	—	403 - 430 MHz	403 - 430 MHz
NUE6282A	2	450 - 482 MHz	450 - 482 MHz
NUF6283A	—	482 - 512 MHz	482 - 512 MHz
HUI 1.300A	—	440 - 470 MHz	403 - 430 MHz
NUF6312A	6	450 - 482 MHz	450 - 482 MHz
NUF1.515A	—	411.2 - 512 MHz	411.2 - 512 MHz



SCH. MATIC NOTES

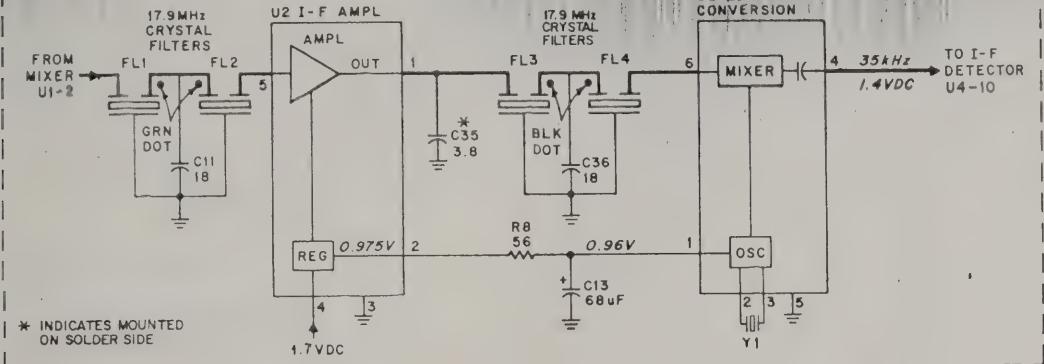
1. UNLESS OTHERWISE STATED, RESISTANCES ARE IN OHMS AND CAPACITANCES ARE IN PICOFARADS.
2. DC VOLTAGES ARE MEASURED FROM POINT INDICATED TO CHASSIS GROUND USING MOTOROLA DC MULTIMETER OR EQUIVALENT.
3. INDICATES CONNECTION POINT TO INTERCONNECT CIRCUIT BOARD.
4. REFERENCE DESIGNATIONS ARE ASSIGNED IN THE FOLLOWING MANNER:

UNIT SERIES	• RECEIVER
100 SERIES	• TRANSMITTER
200 SERIES	• INTERCONNECT BOARD
400 SERIES	• FRONT COVER
5. L121 AND C101 USED ONLY ON MODELS WITH ISSUE Q AND A 10'S.
6. L122 USED ONLY ON 403-420 MHz MODELS: JU104 USED ON ALL OTHER MODELS.



NUE6281A, NUE6282A AND NUE6283A

MODELS NUE6281A, NUE6282A, AND NUE6283A



63B81012C63-A

SECOND OSCILLATOR CRYSTAL FREQUENCIES

CARRIER FREQUENCY f_c	FIRST OSCILLATOR CRYSTAL FREQUENCY f_{01}	SECOND OSCILLATOR CRYSTAL FREQUENCY f_{02}
450.0 - 460.8	54.0125 - 55.3625	17.865
460.8 - 461.0	55.3625 - 55.3875	17.935
461.0 - 462.4	55.3875 - 55.5625	17.865
462.4 - 462.6	55.5625 - 55.5875	17.935
462.6 - 464.4	55.5875 - 55.8125	17.865
464.4 - 464.6	55.8125 - 55.8375	17.935
464.6 - 467.0	55.8375 - 56.1375	17.865
467.0 - 467.2	56.1375 - 56.1625	17.935
467.2 - 470.4	56.1625 - 56.5625	17.865
470.4 - 470.6	56.5625 - 56.5875	17.935
470.6 - 475.1	56.5875 - 57.1500	17.865
475.1 - 475.4	57.1500 - 57.1875	17.935
475.4 - 478.3	57.1875 - 57.5500	17.865
478.3 - 478.5	57.5500 - 57.5750	17.935
478.5 - 482.3	57.5750 - 58.0500	17.865
482.3 - 482.5	58.0600 - 58.0750	17.935
482.5 - 487.4	58.0750 - 58.6875	17.865
487.4 - 487.6	58.6875 - 58.7125	17.935
487.6 - 489.5	58.7125 - 58.9500	17.865
489.5 - 490.0	58.9500 - 59.0125	17.935
490.0 - 494.2	59.0125 - 59.5375	17.865
494.2 - 494.4	59.5375 - 59.5625	17.935
494.4 - 500.2	59.5625 - 60.2875	17.865
500.2 - 500.3	60.2875 - 60.3000	17.935
500.3 - 503.7	60.3000 - 60.7250	17.865
503.7 - 503.9	60.7250 - 60.7500	17.935
503.9 - 506.1	60.7500 - 61.0250	17.865
506.1 - 506.3	61.0250 - 61.0500	17.935
506.3 - 507.8	61.0500 - 61.2375	17.865
507.8 - 508.0	61.2375 - 61.2625	17.935
508.0 - 510.1	61.2625 - 61.5250	17.865
510.1 - 510.3	61.5250 - 61.5500	17.935
510.3 - 512.0	61.5500 - 61.7625	17.865

CRYSTAL FORMULA: $f_c = 8f_{01} + 17.9 \text{ MHz}$

EPF-B201-O

NOTES
A. 1000W CARRIER SIGNAL WITH 1K1
B. MEASUREMENT MADE WITH MOTOROLA
RF VILVILVOMETER WITH HIGH
C. CALIBRATION MADE WITH 100W
D. USE VOLUME CONTROL TO SET
E. MEASUREMENT MADE WITH NO CARRI
F. STAGE GAINS AF: FOR REFERENC
G. SEE INSTRUCTION MANUAL

A

S201
FREQUENCY SWITCH DETAILS

ONE-FREQ MODELS

$R_{C1} \xrightarrow{JU206} R_1$
 $T_{C1} \xrightarrow{JU207} T_1$

TWO-FREQ MODELS

$R_{C2} \xrightarrow{\substack{\text{GRN-BRN} \\ \text{ORG}}} \xrightarrow{F2} F_1$
 $R_2 \xrightarrow{\substack{\text{WHT-ORG} \\ \text{BRN-YEL}}} \xrightarrow{F1} F_2$
 $T_2 \xrightarrow{\substack{\text{WHT-BRN} \\ \text{BRN-YEL}}} \xrightarrow{F1} F_2$

SHOWN IN F1 POSITION;
VIEW FROM KNOB END

FOUR-FREQ MODELS

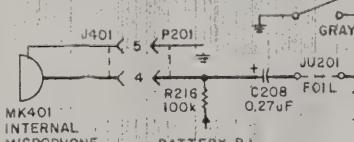
$T_3 \xrightarrow{\substack{\text{WHT-YEL} \\ \text{WHT-ORG}}} \xrightarrow{A} A$
 $T_2 \xrightarrow{\substack{\text{WHT-BRN} \\ \text{WHT-ORG}}} \xrightarrow{B} B$
 $T_1 \xrightarrow{\substack{\text{WHT-BRN} \\ \text{WHT-ORG}}} \xrightarrow{C} C$
 $R_4 \xrightarrow{\substack{\text{GRN} \\ \text{YEL}}} \xrightarrow{D} D$
 $R_3 \xrightarrow{\substack{\text{YEL} \\ \text{ORG}}} \xrightarrow{E} E$

SHOWN IN MAXIMUM COUNTERCLOCKWISE
POSITION; F1 VIEW FROM KNOB END

SIX OR EIGHT FREQ MODELS

$T_4 \xrightarrow{\substack{\text{WHT-BRN} \\ \text{WHT-YEL}}} \xrightarrow{F1} F_1$
 $T_3 \xrightarrow{\substack{\text{WHT-ORG} \\ \text{WHT-BRN}}} \xrightarrow{F2} F_2$
 $T_2 \xrightarrow{\substack{\text{WHT-BRN} \\ \text{WHT-ORG}}} \xrightarrow{F3} F_3$
 $T_1 \xrightarrow{\substack{\text{WHT-BRN} \\ \text{WHT-ORG}}} \xrightarrow{F4} F_4$
 $R_8 \xrightarrow{\substack{\text{WHT} \\ \text{GRAY}}} \xrightarrow{F5} F_5$
 $R_7 \xrightarrow{\substack{\text{GRAY} \\ \text{VIO}}} \xrightarrow{F6} F_6$
 $R_6 \xrightarrow{\substack{\text{VIO} \\ \text{BLU}}} \xrightarrow{F7} F_7$
 $R_5 \xrightarrow{\substack{\text{BLU} \\ \text{GRN}}} \xrightarrow{F8} F_8$

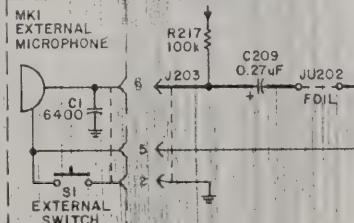
SHOWN IN MAXIMUM COUNTERCLOCKWISE
POSITION; F1 VIEW FROM KNOB END



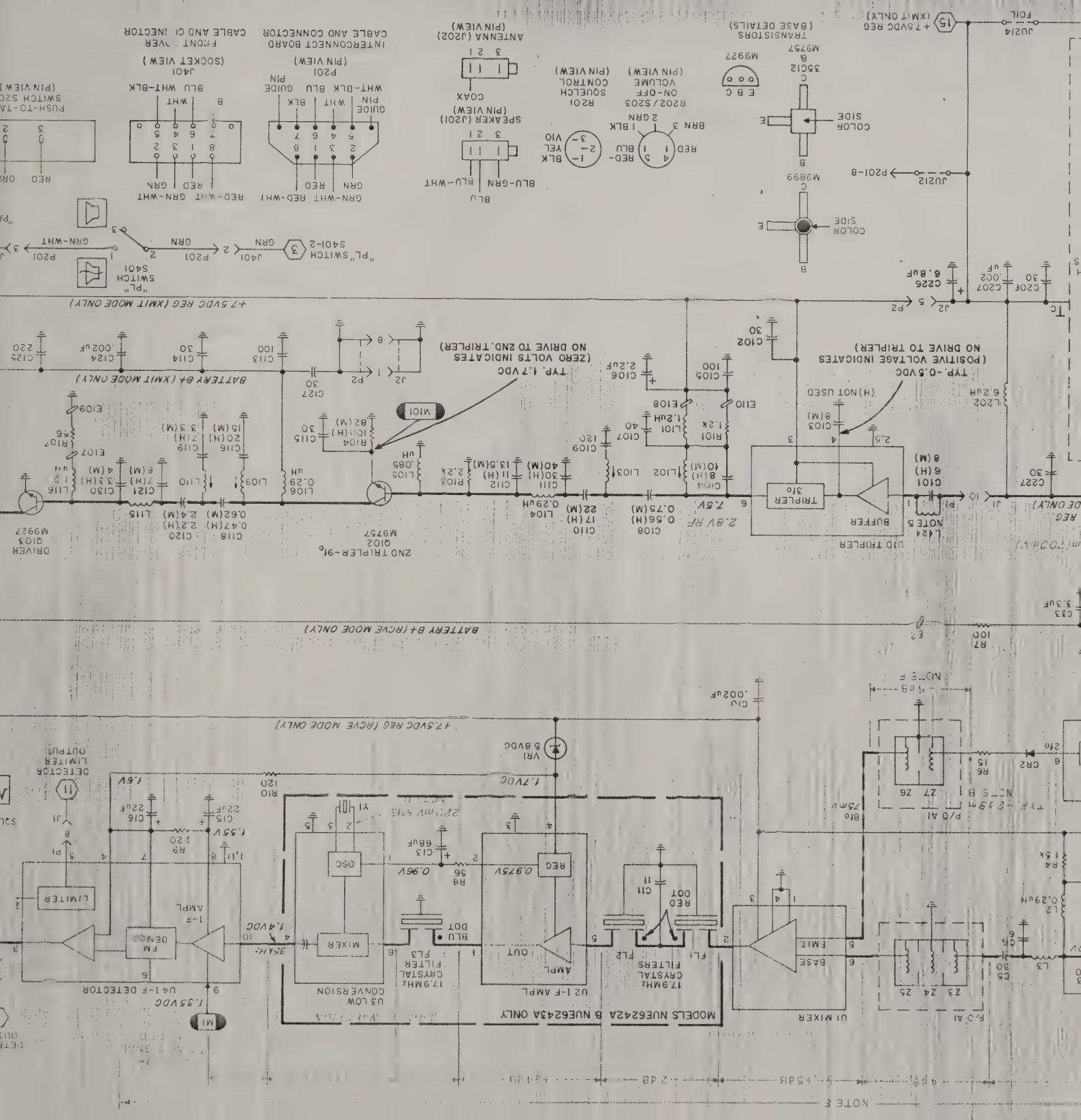
GRAY

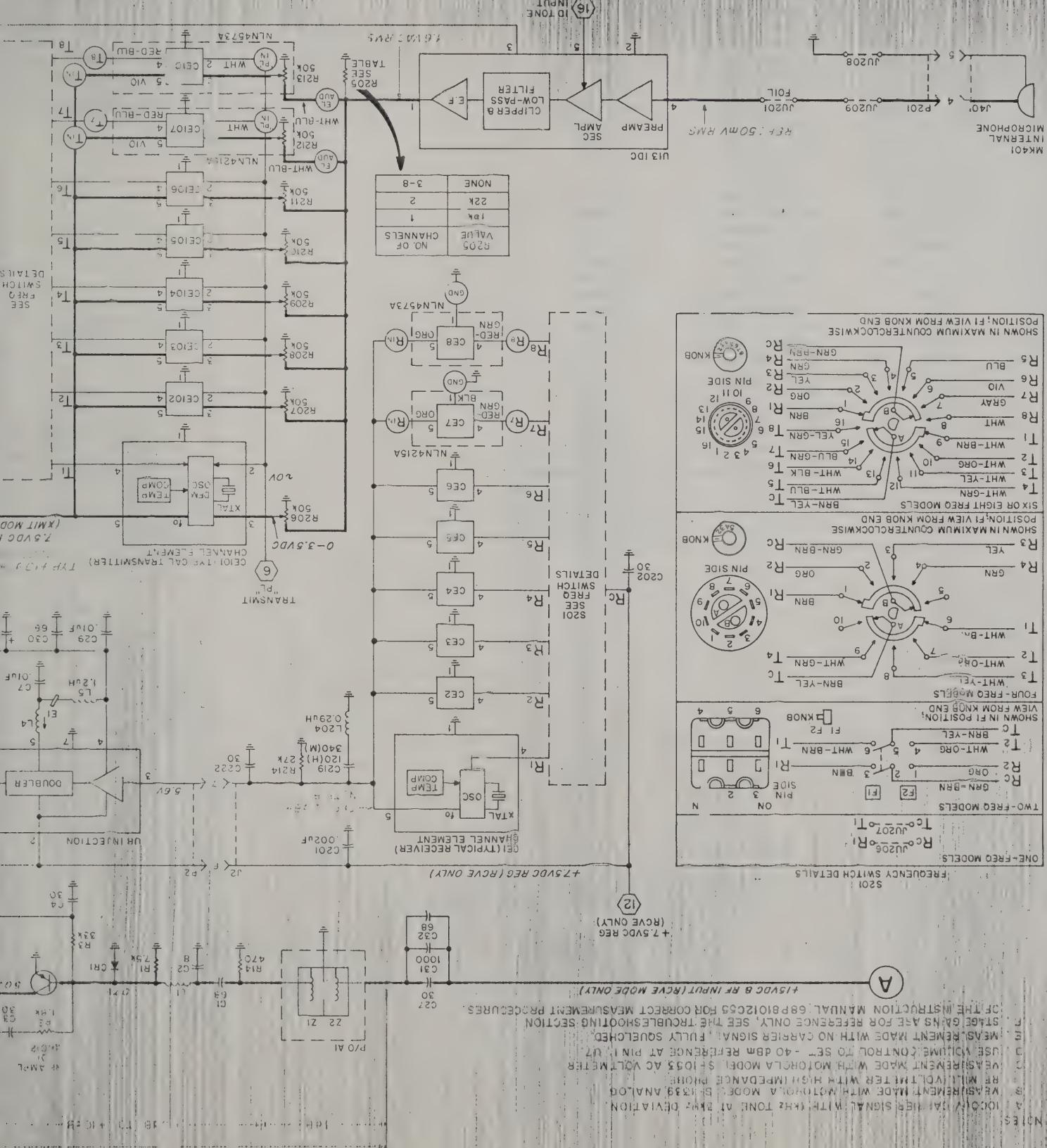
BATTERY B+ FROM S203

ON-OFF SWITCH



FO14



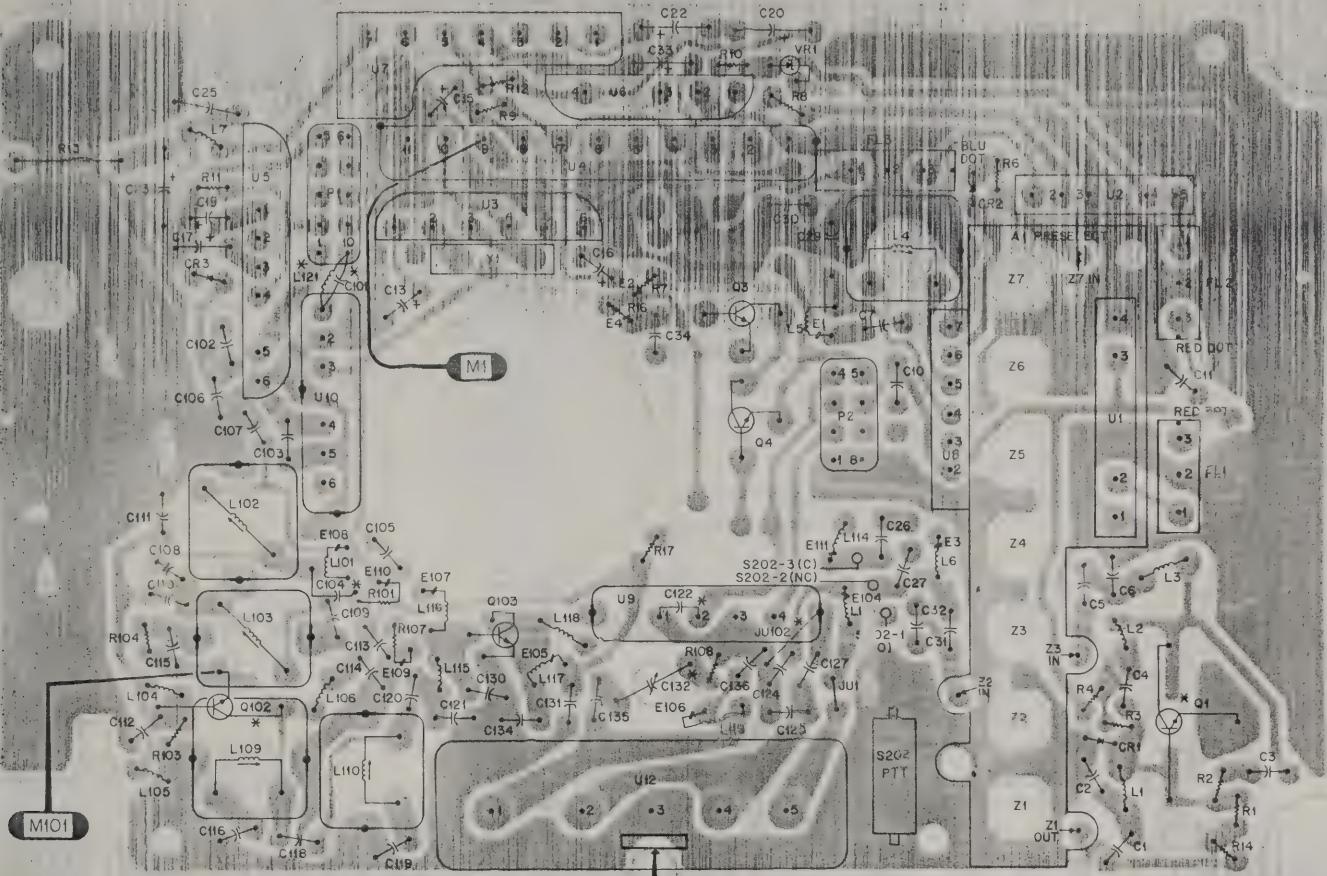


EPE-8201-0

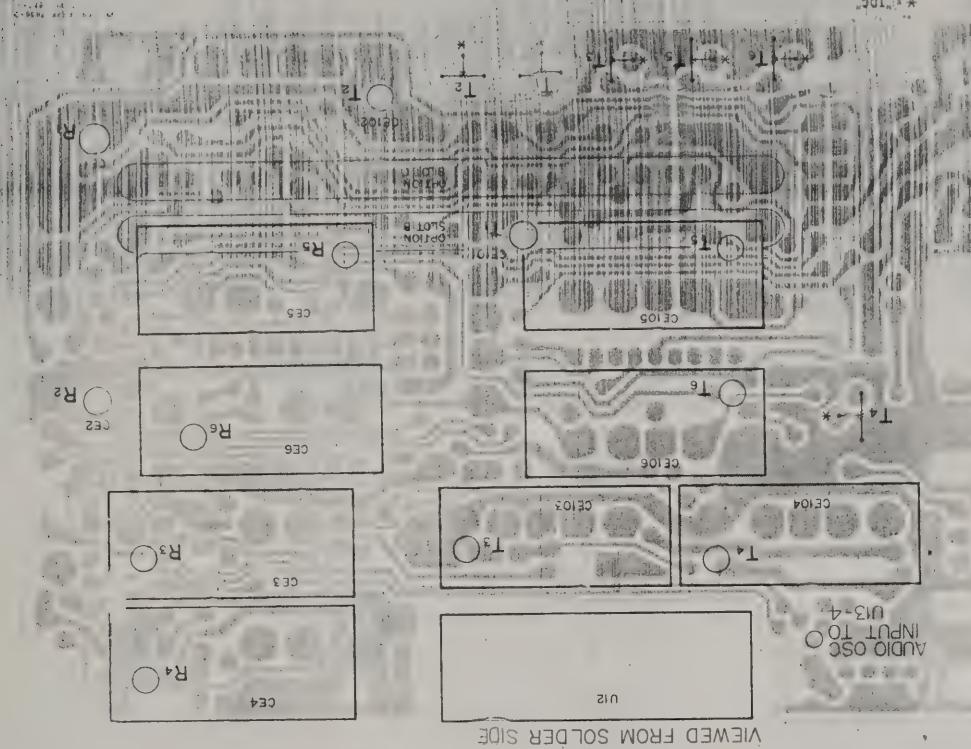
SHASAI FORMULA: $\beta_2 = 8.01 + 17.9 \text{ MHz}$

NU6292A AND NU6293A

NUE6242A & NUE6243A (Viewed from Solder Side)



Interconnect Board Alignment Points



VIEWED FROM SOLDIER SIDE

EPE-7850-0

GENERAL

This radio has been factory aligned and does not require any adjustments. Realignment may be required if components are replaced or have aged. If it is necessary to realign the radio, perform the following procedures:

1. Remove the battery and disassemble the radio as shown in the "Disassembly Procedure". Do not disconnect the front cover receptacle from the interconnect board plug.
2. Connect a dc power supply to the front cover battery contacts; power supply negative to radio negative charging contact and power supply positive to radio positive charging contact (see "Disassembly Procedure").
3. Adjust the power supply output for 15 volts dc.
4. Perform either the "Receiver Alignment" procedure or "Transmitter Alignment" procedure, or both procedures as required.

RECEIVER ALIGNMENT

Preliminary Adjustments:

1. Set PL switch S401 to its off (□) position (if applicable).
2. Set squelch (▲) control R201 to its maximum counterclockwise position.
3. Set frequency switch S201 to the lowest frequency channel.
4. Preposition slug of selector cavity Z1, Z2, Z3, Z4, Z5, Z6, and Z7 one-quarter inch above circuit board solder side.
5. Preposition slug of L4 one turn out of the circuit board solder side.
6. Connect an ac voltmeter to metering point M1 and a frequency counter to the output of the ac voltmeter.
7. Inject a signal from a 17.9 MHz ±100 Hz crystal oscillator into FLL to produce at least a -30 dBm output at M1; then adjust meter to pin the needle by turning output knob down two levels. This is necessary in order to drive the frequency counter.
8. Count the low i-f frequency through the ac voltmeter and frequency counter at M1. Record the reading within ±10 Hz; this reference must read 35 kHz ±1.5 kHz. Then turn off the 17.9 MHz oscillator.

	STEP	ADJUST	FOR	MEASURED AT	USING	NOTE
PREFERRED METHOD	1	Service Monitor: Frequency & Output Level Adjustment dials, & adjust L4, Z1 through Z5	Exact frequency marked on channel element and -30 dBm	M1	Service Monitor or Signal Generator, AC Voltmeter, Frequency Counter	Adjust signal generator for maximum output; if output at M1 is not -30 dBm, adjust L4, Z1, Z2, Z3, Z4, and Z5 until it is, then adjust meter to pin the needle by turning output knob down two levels. This is necessary in order to drive the frequency counter.
	2	Lowest Frequency Channel Element Warp Coil	Recorded frequency in preliminary adjustment step (8) ±250 Hz	M1	Frequency Counter	---
ALTERNATE METHODS	2A	Lowest Frequency Channel Element Warp Coil	Exact channel element frequency ±100 Hz	M1	AC Voltmeter, 17.9 MHz Oscillator, Signal Generator, Oscilloscope	Warp the unit to carrier frequency as follows: a. Set power supply to 15 V dc. b. Reduce signal generator output to minimum and inject signal from a 17.9 MHz ±100 Hz crystal oscillator at FLL and adjust output level for a -30 dBm M1 reading. c. Connect the output of the ac voltmeter to the oscilloscope and set the time base to 5 ms per division and gain to display signal amplitude of approximately 3 divisions. d. Set the signal generator to the exact carrier frequency and increase the output until the waveform on the oscilloscope appears as an amplitude modulated signal. This signal is the resultant of 17.9 MHz crystal oscillator mixing with the first i-f signal which will not be exactly 17.9 MHz until the channel element is warped to the precise frequency by adjusting the channel element warp coil. e. Adjust warp coil while viewing the signal on the oscilloscope for a zero beat or the lowest possible amplitude modulating frequency. This method will provide an accuracy of ±100 Hz adjustment of the channel element.
	2B	Lowest Frequency Channel Element Warp Coil	Exact channel element frequency	M1	AC Voltmeter, 17.9 MHz Oscillator, Signal Generator	Warp the unit to carrier frequency as follows: a. Set power supply to 15 V dc. b. Reduce signal generator output to minimum and inject a signal from the 17.9 MHz crystal oscillator at FLL and adjust output level for a -30 dBm M1 reading. c. Adjust volume control to listen to the audio output. d. Set the signal generator to the exact carrier frequency and increase the output until an audio tone is heard. This tone is the product of the mixing signals described in step 2A, Note d. e. Adjust channel element CEl for a zero beat (no audio tone is heard when properly adjusted).

(Cont'd)

CIRCUIT BOARD DETAIL

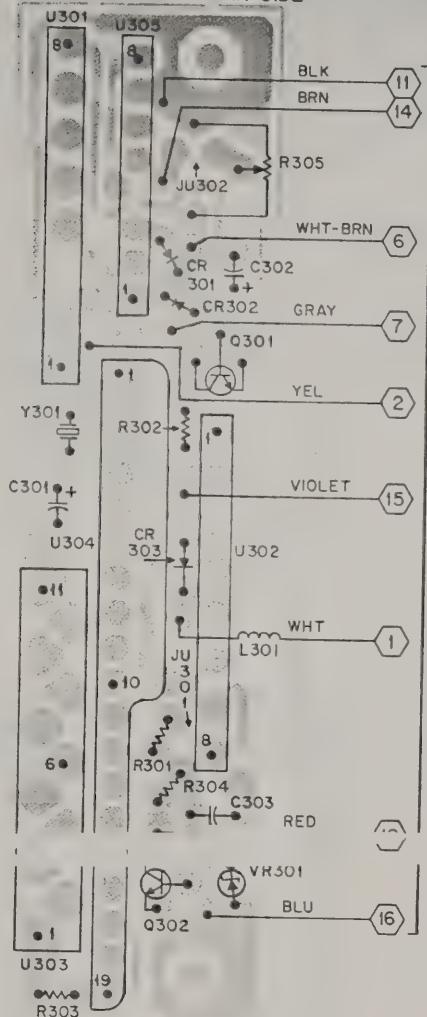
NLN7407A "Digital Private-Line" Deck

PLF-1880-A

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
C301, 302 C303	2305499G16 2105457G09	CAPACITOR, Fixed: 10 μ F $\pm 20\%$; 16 V 1000 pF $\pm 10\%$; 63 V
CR301, 302, 303	4883654H01	DIODE: See Note Silicon
L301	2482723H04	COIL: 0.29 μ H Choke
Q301 Q302	4800869642 4805452G03	TRANSISTOR: See Note NPN: type M9642 NPN: type LM9014D
R301 R302 R303 R304 R305	0660075C97 0660075C73 0660075C89 0660075C77 1805157J01	RESISTOR, Fixed: $\Omega \pm 5\%$; 1/8 W unless stated 100 k 10 k 47 k 15 k Pot., 50 k $\pm 10\%$.
U301 U302 U303 U304 U305	5105337F05 5105337F06 NLN5762A 5105337F17 5105337F10	HYBRID MODULE: See Note Decode Filter Data Clock Code Plug (not part of DPL kit) Digital Processor. Encode Filter
VR301	4805189E03	DIODE: See Note Zener, 5.6 V
Y301	4882656M01	CRYSTAL: 50 kHz
NONREFERENCE ITEMS		
	0300139444 0705699J01 0905287C05 4205175E02 7505506D10 7505506D13 7505506D14 8405700J01	SCREW, Phillips: 2-56 x 5/16 BRACKET SOCKET, Printed Circuit RETAINER, Spacer PAD, Module (for U301) PAD, Module (for U304) PAD, Module (for U302) CIRCUIT BOARD

NOTE: For optimum performance, order replacement diodes, transistors, and hybrid modules by Motorola part number only.

VIEWED FROM SOLDER SIDE

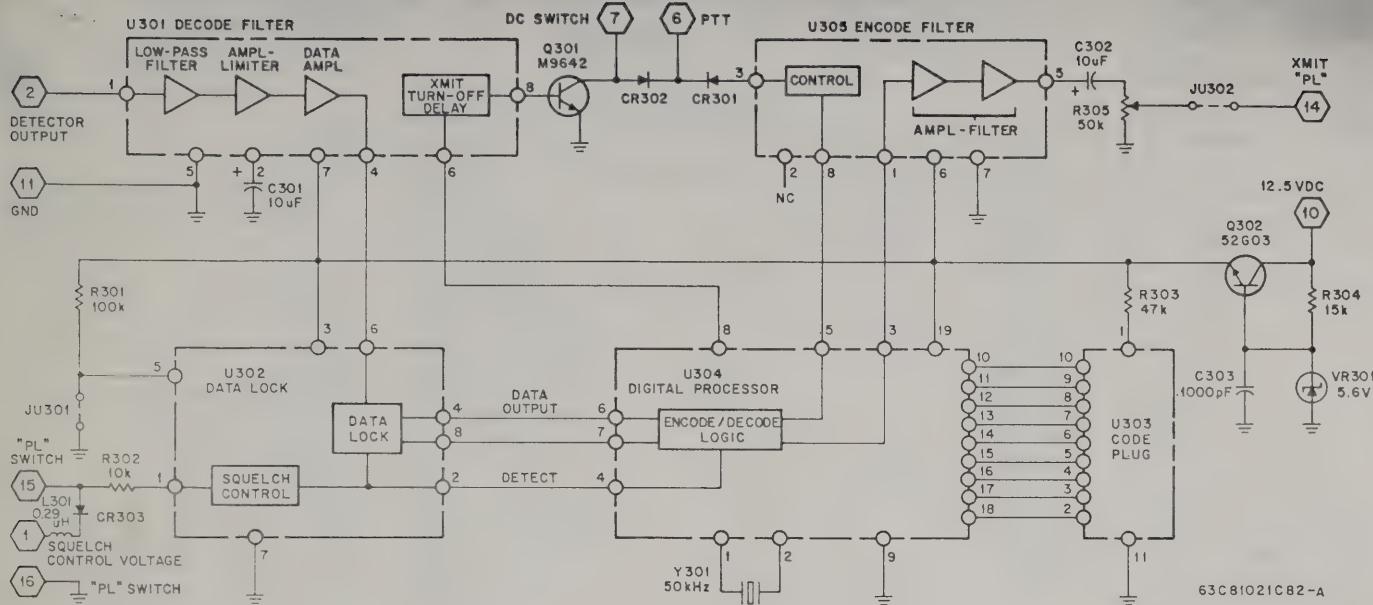


SS-AEPF-10740-0
CS-AEPF-10741-0
OL-AEPF-10742-A

PL SQUELCH SENSITIVITY CHECK

1. SET THE PL/SQUELCH CONTROL SWITCH (S203/R201) FULLY COUNTERCLOCKWISE PAST DETENT TO THE PL ON POSITION.
2. APPLY AN ON-FREQUENCY CARRIER SIGNAL FROM THE SIGNAL GENERATOR. MODULATE THE SIGNAL GENERATOR WITH THE PROPER PL TONE, AT ± 0.5 kHz DEVIATION.
3. THE SQUELCH CIRCUIT SHOULD OPEN WHEN THE SIGNAL GENERATOR OUTPUT IS INCREASED ABOVE 0.1dB ± 0.25 dB

SCHEMATIC DIAGRAM



DPL TEST MEASUREMENTS CHART

PIN NO.	ENCODE		DECODE		PIN NO.	ENCODE		DECODE	
	VOLTAGE	WAVEFORM	VOLTAGE	WAVEFORM		VOLTAGE	WAVEFORM	VOLTAGE	WAVEFORM
DECODE FILTER U301									
1	0 Vdc	---	2.3 Vdc	---	1	2.75 Vdc	---	2.75 Vdc	---
2	0.14 Vdc	---	2.3 Vdc	---	2	---	0.5 Vp-p at 500Hz	---	0.5 Vp-p
4	5.0 Vdc	---	5.0 Vdc	5.0 Vp-p(1)	3	2.4 Vdc	5.0 Vp-p(3)	2.0 Vdc	---
6	5.0 Vdc	---	0 Vdc	---	4	0 Vdc	---	0 Vdc	---
7	5.0 Vdc	---	5.0 Vdc	---	5	5.0 Vdc	---	0 Vdc	---
8	0.79 Vdc	---	0 Vdc	---	6	1.0 Vdc	5.0 Vp-p at 100Hz	---	5.0 Vp-p(1)
DATA LOCK U302									
1	5.0 Vdc	---	5.0 Vdc	---	7	---	5.0 Vp-p, 537 Hz Pulse Train	---	5.0 Vp-p, 537 Hz Pulse Train
2	0 Vdc	---	0 Vdc	---	8	5.0 Vdc	---	0 Vdc	---
3	5.0 Vdc	---	5.0 Vdc	---	10 thru 18	0 Vdc (2)	---	0 Vdc (2)	---
4	1.0 Vdc	5.0 Vp-p at 100 Hz	5.0 Vp-p(1)	5.0 Vp-p(1)	19	5.0 Vdc	---	5.0 Vdc	---
5	0 Vdc (4)	---	0 Vdc (4)	---	ENCODE FILTER U305				
6	5.0 Vdc	---	5.0 Vdc	5.0 Vp-p(1)	1	2.4 Vdc	5.0 Vp-p(3)	2.0 Vdc	---
8	---	5.0 Vp-p, 537 Hz Pulse Train	---	2	2.0 Vdc	---	2.0 Vdc	---	
CODE PLUG U303									
1	5.0 Vdc	---	5.0 Vdc	---	3	0.88 Vdc	---	5.0 Vdc	---
2 thru 10	0 Vdc (2)	---	0 Vdc (2)	---	5	2.0 Vdc	1.2 Vp-p(3)	2.0 Vdc	---
					6	5.0 Vdc	---	5.0 Vdc	---
					8	5.0 Vdc	---	0 Vdc	---

TEST MEASUREMENTS ARE NOMINAL, PL SWITCH ON OR OFF AND NO CARRIER INPUT. NUMBERS IN () REFER TO THE FOLLOWING NOTES:

- (1) DIGITAL WAVEFORM.
- (2) CODE PLUG REMOVED.
- (3) RANDOM DIGITAL DPL WAVEFORM; CHANGES TO 135 Hz WAVEFORM ON DEKEY OF PTT SWITCH.
- (4) JU301 SHORTED (5.0 VDC IF JU301 IS OPEN).

EPF-10739-A

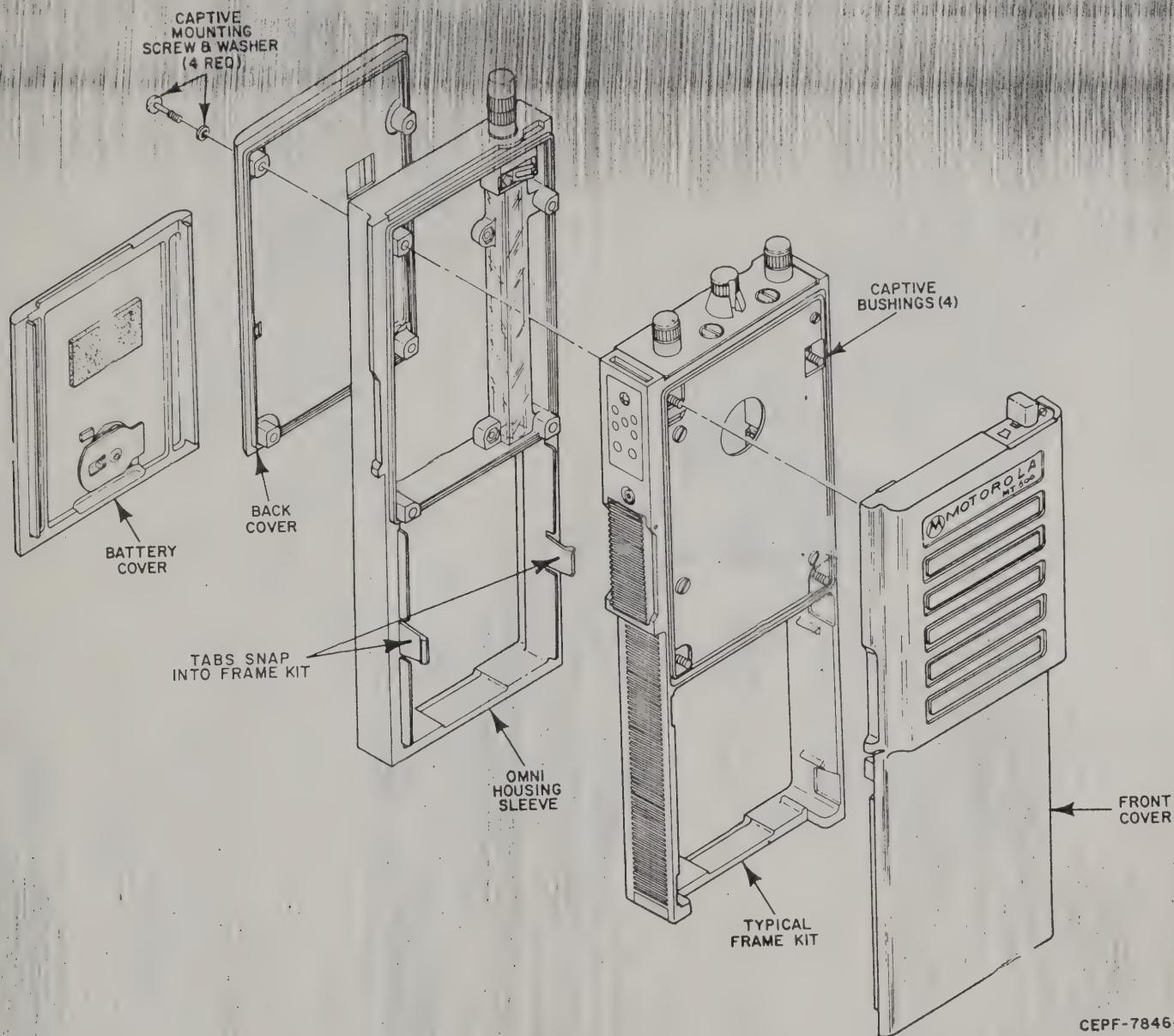
Exploded View Parts List

PLF-1891-A

ITEM NO.	MOTOROLA PARTNO.	DESCRIPTION			
1	0105950G05 or 0105950G06	ASSEMBLY, Front Cover: includes item 2: Standard Silverized	59	**	PLATE, Retainer
2	4205187J01	RETAINER, Gasket: not field repairable. order item 1	60	**	BUSHING
3	3205082E10	GASKET, Seal	61	**	PANEL, Control
4	3305153J01	LABEL, Nameplate			** Items 59, 60, and 61 are not field repairable; order Assembly: 0105950G14
5	1105932J01	ADHESIVE, Felt	62	See Note	SWITCH, PL. Squelch Control (S201/R201)
6	3505152J01	FELT, Speaker	63	See Note	JACK, Speaker (J202)
7	See Note	SPEAKER (LS401)	64	0405662K01	WASHER, Insulating
8	7505182J01	PAD, Microphone Boot	65	3205082E15	SEAL, O-Ring
9	See Note	MICROPHONE (MK401)	66	0205164J01	NUT, Spanner
10	0705155J01	BRACKET, Microphone	67	0400002642	LOCKWASHER, Internal Tooth
11	7505200J01	BOOT, Microphone	68	3205082E09	SEAL, O-Ring
12	0300138651	SCREW, Phillips: 2-56 x 1/4"	69	0282653D03	NUT, Spanner
13	4205670D01	CLAMP, Speaker	70	3205933J01	SEAL, Switch
14	See Note	CONNECTOR (P401)	71	3205082E11	SEAL, O-Ring
15	3205332K01	SEAL	72	3805216J02	PLUG, Seal
16	4182093A07	SPRING, Actuator: coiled	73	3205082E12	SEAL, O-Ring
17	4505177J01	ACTUATOR, Push-to-Talk	74	4305206J01	SLEEVE
18	0705175J01	BRACKET, Actuator	75	6405208J01	PLATE, Pressure
19	4105176J01	SPRING, Actuator	76		ESUTCHEON, Graphic; for:
20	2205179J01	PIN, Retainer			Basic, Carrier Squelch Models
21	3205082E13	GASKET, O-Ring			Universal, Carrier Squelch Models
22	0305466C02	SCREW, Special: 4-40 x 0.140"			Basic, PL Squelch Models
23	4605170J01	STUD, Latch			Universal, PL Squelch Models
24	3205082E14	GASKET, O-Ring	77		SEAL, O-Ring (p o item 78)
25	4105172J01	SPRING, Latch	78	See Note	CONNECTOR, Antenna (J203); includes
26	5505173J01	LATCH, Pawl			item 77
27	0405171J01	WASHER, Teflon	79	See Note	CONNECTOR, Universal (J201)
28		Not Used	79A	3805216J01	PLUG, Seal (Basic Models)
29		ASSEMBLY, Housing: includes items 36, 37, 38, and 39: Standard Silverized	80	0205050E01	NUT, Spanner
	0105954G94 or 0105954G95	SCREW Phillips: 4-40 x 1/4"	81	0305662D17	SCREW, Captive
30	0300120621	WASHER, Seal	82	0300129A24	SCREW, Slotted: Nylon
31	0484345A06	LABEL, FCC Identification: not field replaceable	83		Not Used
32	-----	LABEL, Frequency: not field replaceable	84		Not Used
33	-----	RETAINER, E-Clip	85	3205217J01	SEAL, Cap
34	4210219A25	FUSE (F501)	86	0383174C05	SCREW, Set
35	See Note	CONTACT, Strap	87	3605207J01	KNOB, Volume and Squelch
36	•	CONTACT, Positive	88		Not Used
37	•	CONTACT, Negative	89	0405171J02	CHER Nylon
38	•	BUSHING, Strap	90	0282653D07	NUT, Spanner
39	•		91	0400009777	LOCKWASHER, No. 4
		• Items 36, 37, 38, and 39 are not field repairable; order applicable Housing Assembly (item 29).	92	1405637K01	INSULATOR
40	3205082E13	GASKET, O-Ring	93	3205643K01	GASKET
41		Not Used			
42	0305887J01	SCREW, Slotted: 4-40 x 3/16"			
43	8405156J01 or 8405158J01 or 8405159J01	CIRCUIT BOARD, VHF CIRCUIT BOARD, UHF (1-Watt) CIRCUIT BOARD, UHF (4-Watt)			
44	See Note	PTT SWITCH (S202)			
45	0705162J01	BRACKET, PTT Switch			
46	0305887J01	SCREW, Slotted: 4-40 x 3/16"			
47	4305936J01	BUSHING, Shoulder			
48	3905174J01	CONTACT			
49	0400008406	LOCKWASHER			
50	0300138651	SCREW, Phillips: 2-56 x 1/8"			
51	4305209J01	SLEEVE			
52	-----	TYPICAL BATTERY PACK			
53		Not Used			
54A	See Note	SWITCH, Frequency: Toggle (S201)			
		-----, J-Hinge			
56	2905658K01	LUG			
56A	-----	LOCKWASHER, Internal Tooth (p o item 78)			
57	See Note	SWITCH, Volume ON-OFF (R202 S204)			
58	3905195J02	CONTACT			

NOTE: Refer to electrical parts list for part number and description.

DISASSEMBLY PROCEDURE

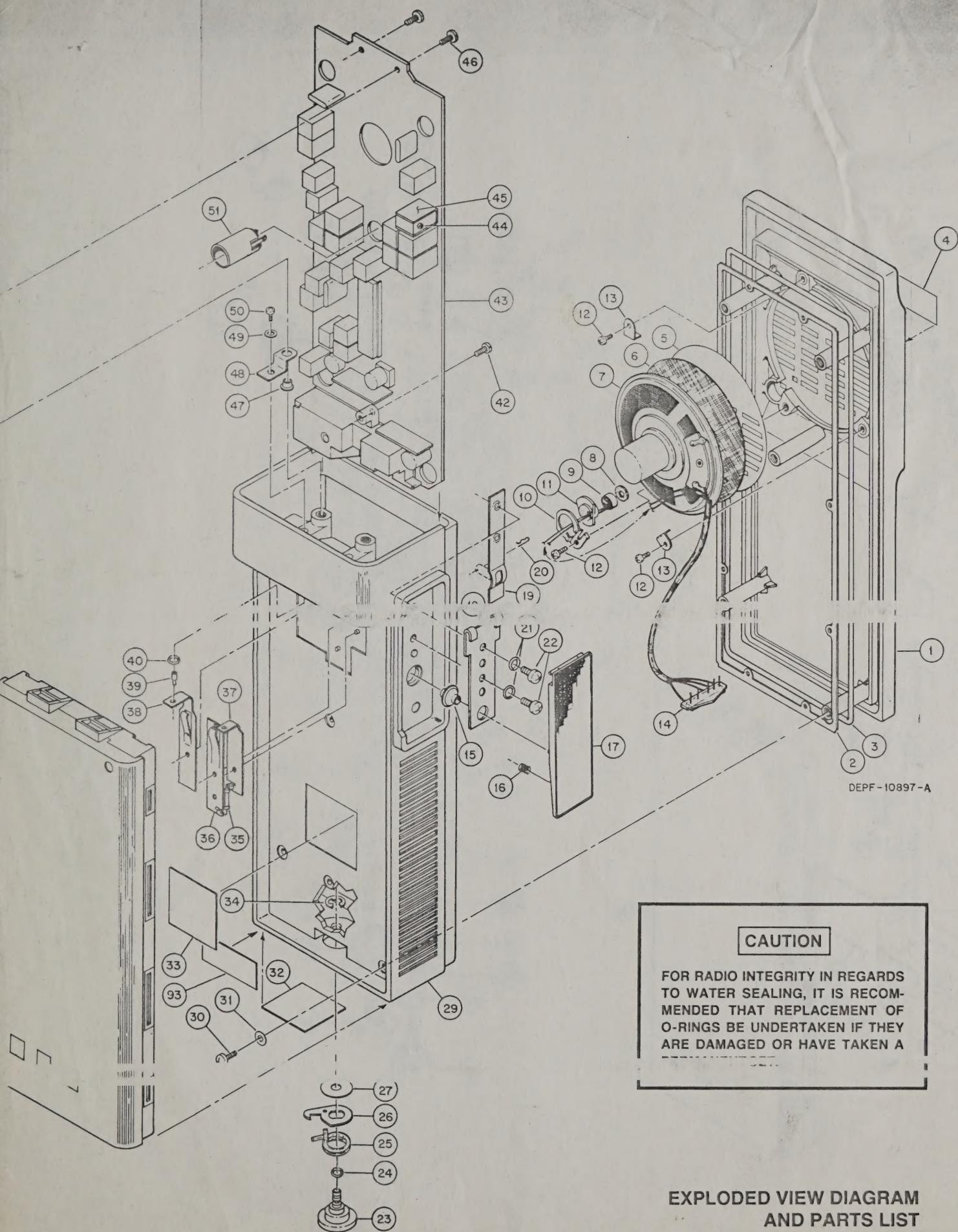


CEPF-7846-A

PROCEDURE

1. TURN THE SLOTTED SCREW HEAD ON THE BATTERY COVER ONE QUARTER TURN COUNTERCLOCKWISE AND REMOVE THE BATTERY COVER.
2. REMOVE THE BATTERY.
3. LOOSEN THE FOUR CAPTIVE SCREWS HOLDING THE BACK COVER AND REMOVE THE BACK COVER.
4. REMOVE SNAP-ON SLEEVE (OMNI-HOUSING ONLY).
5. LOOSEN THE FOUR CAPTIVE BUSHINGS HOLDING THE CHASSIS FRAME TO THE FRONT COVER.
6. SEPARATE THE FRONT COVER FROM THE FRAME.
7. UNPLUG THE WIRES CONNECTING THE FRONT COVER TO THE CHASSIS FRAME.

EPF-7847-O



CAUTION

FOR RADIO INTEGRITY IN REGARDS
TO WATER SEALING, IT IS RECOM-
MENDED THAT REPLACEMENT OF
O-RINGS BE UNDERTAKEN IF THEY
ARE DAMAGED OR HAVE TAKEN A

